

OVERSEAS NEWS

Rhodesia talks still facing interim government hurdle

BY TONY HAWKINS

DELEGATES FROM the four have reached a consensus on what they would like to see—(in terms of the white electorate) elected legislature. This has been called for by a prominent member of Israel's Labour Party, now in opposition, on Foreign Minister Dajan's statement in an interview in Zurich a week ago.

At the root of the disagreement is Mr. Smith's fear that any majority rule executive being "imposed" on the country before his promised referendum could dangerously undermine his position at that referendum.

The blacks want a system whereby 75 per cent of the ministerial posts would be held by the nationalists and only 25 per cent by Mr. Smith's ruling Rhodesia Front.

They say also that parliament should be recessed and the constitution, registration of voters and determination of London over the weekend he was this has been done can the plan be put to the 100,000 white voters in the constituency. Only when all "quite optimistic" and that the constitutional agreement could be done in time for a referendum. Mr. Smith reached last Wednesday between Rhodesia's Mr. Ian Smith and next fortnight or possibly within a few days. The disagreement on a majority rule executive—with cluding himself.

The interim government is many more black than white. Mr. Sithole is to have talks between all three nationalist ministers—and has agreed to with Mr. David Owen, the Foreign Secretary on Monday.

Front line states may meet soon

BY MICHAEL HOLMAN

THE VISIT of Mr. Joaquim Chissano, Mozambique Foreign Minister to Lusaka this weekend, carrying a message for President Kaunda from President Macelha, led to speculation that the five front-line states may meet soon to consider the implications of the Salisbury agreement between Prime Minister Ian Smith and three internally-based black leaders.

The five—Mozambique, Zambia, Tanzania, Botswana and Angola—last met in the Mozambique town of Beira shortly before Christmas. The outcome was a

SALISBURY, Feb. 19.

Debate call on Israeli links with Ethiopia

By L. Daniel

JERUSALEM, Feb. 19. AN URGENT Knesset debate

has been called for by a prominent member of Israel's Labour Party, now in opposition, on Foreign Minister Dajan's statement in an interview in Zurich a week ago.

It was this statement which caused the Ethiopian Government to expel all Israelis within 48 hours, M.K. (Member of Knesset) Yossi Sarid stated on Israeli television last night. He said that no Israeli nationals have remained in Ethiopia, but some sources here claimed this morning that several commercial representatives had been allowed to stay on.

Gen. Dayan's statement was, until last night, almost studiously ignored both by the local press and Israeli radio and TV. While the fact that Israel has rendered

assistance to Ethiopia in the past had been known, it was not given any publicity. This assistance, according to reports published abroad, included the training of Ethiopian troops by Israeli instructors on Soviet tanks at their disposal.

John Worrall adds from Nairobi: "The Kenyan Government this weekend said it had not been informed that Iran was recalling its ambassador from Nairobi and closing its embassy. The announcement was made in Tehran on Saturday by the Iranian Foreign Minister, Mr. Abbas Ali Khatami."

Acting Kenyan Foreign Minister, Mr. James Osoyo, said the Kenyan Government had not been informed of anything officially.

A row erupted after Kenyan protests on television about Iran's involvement in the war in the Horn of Africa on the side of Somalia. "Iran is not an African country to take part in African issues," it was said.

Egyptian intervention ends in bloodshed

ALL THE hostages aboard a hijacked Cyprus Airways DC-9 plane escaped safely to-night after a fierce gun battle between Egyptian commandos and Cypriot security forces at Larnaca airport in Cyprus.

An official in the control tower, contacted by telephone, said the shooting broke out when Egyptians tried to storm the plane, which was being held by two unidentified gunmen.

He said the Cypriots immediately intervened to prevent the action and killed at least five commandos and wounded many more. Palestinian sources here said earlier at least 15 Egyptians had been killed.

The official said: "The tarmac is like a battlefield, but all the hostages and the crew are safe."

Michael Tingay writes from Nicosia: "The Egyptian intervention in the Cyprus hijacking and the fighting with Cypriot security forces which it triggered, is the

November.

Bombings and shootings against Egyptian embassies have so far resulted in little damage.

That four Palestinians, including two PLO officials, known to be with PLO Chairman Yasser Arafat should have been taken hostage is the most public indication yet of the political disarray among the Palestinians. Observers said that Arabs may have begun to over-react in many different ways, regardless of their political colour.

One of the factors which may have encouraged the Egyptian Government to try to intervene at Larnaca is that Cyprus has gained the reputation in extremist Arab circles as a soft

Government following the breakdown of a secret agreement negotiated by the late Archbishop Makarios, who strove to keep Cyprus out of the Arab-Israel disputes.

The Sibai incident and the

more serious Larnaca fiasco is the third major incident involving Cyprus in the past six months.

Last September, the Nicosia Government permitted an Algerian and a Palestinian guerrilla to go free after they had hijacked a plane from Spain and made demands for the release of prisoners in Israel. Soon afterwards Cyprus was involved in a dispute with West Germany, when Nicosia refused permission for a West German commando team, including British men from the Special Air Service, which had landed at Larnaca to attack the plane which was subsequently stormed dramatically at Mogadishu.

Observers believe it was the Mogadishu incident and the anger felt in Egypt after the murder of Mr. Sibai in Nicosia which led to President Sadat's decision to send in commandos regardless of the attitude of the Cyprus Government.

Begin is 'crying for the moon' says Sadat

BY ROGER MATTHEWS

PRESIDENT SADAT of Egypt said today that he could not understand how the United States could support his peace efforts while at the same time lavishing arms on Israel.

In an interview with the weekly "October" magazine Mr. Sadat argued that Israel could play with the idea of peace simply because of the enormous quantity of military equipment that had been received from Washington.

He once again dismissed the F-5E fighters which President Carter has agreed to sell to Israel as "tenth-rate planes." He argued that Israel objected to the sale of the F-5s because it wished to monopolise links with the U.S. and feared that aircraft sales might be followed by the supply of equipment to the Egyptian army.

Mr. Sadat is reported to have recovered some of his optimism since his talk with President Carter. He is also satisfied that Dr. David Owen, Britain's Foreign Secretary, is to visit Israel. It is supposed in Cairo that his trip is aimed at persuading Israel to be more flexible on the issues of settlements in Sinai and a homeland for the Palestinians.

Mr. Andrew Young, Washington's Ambassador to the United Nations, has nevertheless caused some irritation here with his weekend remarks that the U.S. had to provide Mr. Sadat with aircraft in order to forestall the threat of a military coup. White senior generals have undoubtedly been pleased at Mr. Carter's arms

offer they are equally well aware of sabotage and fomenting sedition among students. A number of Communist leaders are

powerful in the Middle East and said to have been found in their

match the Soviet Union's arms supply role during the early 1970s.

Another reported coup threat came in an official statement from the military prosecutor yesterday. He stated that 34 members of a Communist organisation, whose arrest was previously announced, were to stand trial on charges of attempting to stage a coup. They are accused of trying to change the system of

Syrian President Hafez Al-Assad leaves to-day on a three-day visit to Moscow seen as part of efforts to increase the political and military standing of the five-member Arab "resistance front" forced last year.

Information Minister Ahmed Iskander told Reuters to-day the President's talk would focus on

a strengthening of Syrian-Soviet relations and their joint struggle against imperialist aims in Arab territories.

W. German terrorism law threatened by the liberals

BY JONATHAN CARR

BONN, Feb. 19.

THE ANTI-TERRORISM measures passed by the Bundestag with a majority of only one vote may not become law in their present form—and will continue to be a source of friction between the West German government coalition partners.

This became clear following an interview given to-day by Herr Hans-Dietrich Genscher, leader of the Liberal Free Democrats (FDP), junior partner in the coalition. He was noticeably cautious about the FDP's attitude during the rest of the legislative process through which the anti-terrorism steps which must pass.

The FDP is angered because the proposal it introduced with its "Social Democrat" (SPD) partner were almost torpedoed by four SPD deputies, who decided to vote against them. The conservative CDU-CSU opposition voted en masse against the measures, saying they were too weak.

The FDP could now try to use its influence in the Bundesrat, to strengthen them.

The second chamber grouping

represents the provincial states to prevent relaxation there of the measures. It has such leverage because in two states it is in coalition with its opponents at national level, the CDU.

But to-day Herr Genscher said he could not prejudge the attitude of these States, adding sharply that it was not up to the FDP to use its provincial coalitions with the CDU to correct the internal problems of the SPD.

This statement is one of the clearest examples yet of a greater estrangement between the SPD and FDP—already exemplified by the aloof attitude of the Liberals when Chancellor Helmut Schmidt recently reshuffled his Cabinet, replacing only SPD Ministers.

The anti-terrorism measure seem bound to go to the all-party Parliamentary arbitration committee where the CDU will seek its influence in the Bundesrat, to strengthen them.

Italian Communists call truce for all-party talks

BY DOMINICK J. COYLE

ROME, Feb. 19.

ITALY's Communist Party to-day temporarily set aside its political demands, as the country's six parties try to reach a compromise agreement on the terms of an emergency economic programme.

The PCI is not dropping its demands—for a clear and unambiguous place in the next government—nor is the party signed over the weekend that it was agreeable to reflect the state of Peru's finances," one banker said. Essentially the banks will be trying to help Peru avoid a default on its debt which would have far-reaching repercussions.

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Mrs. Bhutto re-arrested

By Simon Henderson

ISLAMABAD, Feb. 19.

THE wife of Pakistan's detained former prime minister, Mr. Zulfikar Ali Bhutto, was put under house arrest to-day for the fourth time since the military ruler, General Zia ul Haq, took over last July. Mrs. Nasrat Bhutto, who is leading the Pakistan People's Party during her husband's trial on murder charge, has to stay in her Lahore home until Tuesday night. Previous house arrests have prevented her leading demonstrations in protest against Mr. Bhutto's detention.

Mindful of a riot that occurred when she attended a cricket match last December, the authorities military government's action enabled the India/Pakistan hockey international to pass off in the city without incident this afternoon. A large crowd including General Zia watched India win 2-1.

China's Parliament

PEKING, Feb. 19.

CHINA'S parliament will meet on February 26, the New China News Agency (NCNA) announced today.

The fifth National People's Congress, the country's rubber stamp parliament will put the official seal of approval on the changes that have taken place in the country since the death of Mao Tse Tung in September 1976 and the battle against the extremist influence that still continues.

The session is also expected to give the clearest insight into the country's present power structure.

to aspects of his outline economic programme.

But the hub of the crisis, which left Italy without a Government for just over one month remains political. The Communists, who at first demanded seats in the next Cabinet, now insist that their support for a new administration will depend on the Christian Democrats accepting the PCI for the first time in 30 years as part of a Parliamentary majority sustaining a new minority DC Government.

The Christian Democrats, who traditionally have campaigned on a strong anti-Communist ticket, are reluctant to concede such enhanced political status to the PCI in part because over one-third of the Party's backbenchers have warned Sig Andreotti that they will reject such a proposal.

Following a fresh round of talks with party experts this week, Sig Andreotti is expected to call another collegial meeting of party leaders and it is also likely that the DC Parliamentary Party, if not indeed the Party's national executive will be summoned, but special session to determine finally what if any compromise is to be agreed with the Communists.

Very low poll in Soweto

BY QUENTIN PEEL

JOHANNESBURG, Feb. 19.

ONLY 492 voters went to the polls in Soweto this weekend to elect a Community Council—the body proposed by the Government as a municipal authority for the 1m-plus black township complex.

The voters represented just 6 per cent of the eligible electors in two Soweto wards where there was a contest, while another nine candidates were elected unopposed. There were no candidates in 19 of the 30 wards.

The stay-away follows calls by several radical black movements, including the Soweto Committee of Ten, whose members are all in detention, and the Soweto Action Committee, its successor.

Dr. Conni Mulder, the minister responsible for black affairs (as Minister of Plural Relations and Development), has announced that he plans to call by-elections in the vacant seats, in spite of the apparent lack of interest. Soweto has 128,700 registered voters out of an estimated 300,000 eligible to vote.

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Lloyds Bank Group

WORLD TRADE NEWS

Japanese win \$80m. order for Bahrain gas project

DOINA THOMAS

AIN's gas gathering and the project. The proposed capital facility involving all of the new company is seen as a move by Bahrain to conserve its hydrocarbon resources as well as a cent each being held by the further step towards diversifying income. Although no news of the industrial control system in Bahrain and is the first subsidiary, the Bahrain Petroleum Company manages the products have been announced since its participation in the island's oil fields. Apeiron is the project is considered highly reliable and likely to repay its initial borrowings within five years.

Arab Petroleum Exporting Countries' investment company, which lends at commercial rates, will collect the associated Bahrain's oil fields, which produce around 65,000 barrels a day and produce propane, \$70m., and the total project is estimated to have a further life of about 20 years, which means Bahrain will be the first Gulf oil exporter to exhaust its natural gas reserves. But the island's natural gas reserves have been placed in the 6,000-10,000 cubic feet league.

In the 1978 budget Bahrain's own oil, together with revenues from the offshore field of Abu Safa, which is shared with Saudi Arabia, is expected to provide an income of \$404.5m. out of 18-month-old Bahrain's natural gas financing of the new company is the youngest State oil financing though it has not yet been completed but it ranks as one of the 37 oil producers. At present active banks in the \$15.7bn. invested at an estimated around 100m.-110m. cubic feet. Construction is expected to start in the autumn and the subsidiary company is to plant to come on stream in 1980. This gas gathering and processing by Banoco to manage.

BAHRAIN, Feb. 19.

French protest over fastener imports

PARIS, Feb. 19.

THE FRENCH Bolt and Screw Manufacturers' Association have protested against low-priced imports which have resulted in French sales of domestically produced products falling by 20 per cent. in the last four years.

The Association's president, Henri Lorrain, pointed out that while national production of bolts and screws totalled 160,000 tons in 1977 (or Frs.1.2bn. in value terms), this only accounted for 70 per cent. of French sales of 200,000 tons.

Importers are getting 30 per cent. of the French market by selling their products between 75 per cent. below those of French manufacturers, he re-

ARGENTINA

Crisis days for motor industry

BY ROBERT LINCOLN IN BUENOS AIRES

THE ARGENTINE motor industry, which contributes more than 10 per cent. of the country's gross industrial product, is in its deepest crisis of its 18-year history.

Deliveries of finished units to dealers declined 27 per cent. in November and 38 per cent. in December, when only 8,000 units were sold. In the same month, only 633 tractors were sold.

The Government appears to have decided to act. A committee appointed by the Economy Ministry has devised a project calculated to lower costs

estimated that stocks totalling 100,000 units are committee proposes a reduction of 70 per cent. of French sales of 200,000 tons.

Importers are getting 30 per cent. of the French market by selling their products between 75 per cent. below those of French manufacturers, he re-

ported. The industry, which is suffering from cash-flow problems, has turned to the French authorities for help to obtain subsidies, but to urge them to halt the entry into France of any product at any price, he said.

M. Lorrain noted that the recent increase of steel prices by 8.7 per cent. will widen the price gap between French bolts and screws and those from abroad.

The automotive industry here, Mr. Ruyundo Podesta, Secretary of Industrial Development, commented the other day: "not to obtain subsidies, but to urge them to halt the entry into France of any product at any price," he said.

M. Lorrain noted that the recent increase of steel prices by 8.7 per cent. will widen the price gap between French bolts and screws and those from abroad.

The biggest exporter to France is Italy, followed by West Germany, which together account for two-thirds of French imports of bolts and screws. France also imports from Japan, Taiwan and East European countries.

AP-DJ

Swiss deficit

By JOHN WICKS

ZURICH, Feb. 19.

THE SWISS Foreign Trade balance showed a deficit of Frs.210.4m. for January after surpluses for the two previous months. But foreign-trade figures are not fully comparable with those for 1977, since industrial gold movements have at the start of this year been taken out of the statistics, while certain alterations have been made to chemical trade figures to put them in line with international standards.

The absolute totals were higher by 5.8 per cent. for exports than those recorded for January, 1977 and by 7.8 per cent. for imports.

If there has been a policy at all it has been one of protecting the Argentine industry from foreign competition. Recently a high functionary in the palace of the Treasury noted the circumstance that all the motor vehicle companies manufacturing here are part of big multinational companies "which did not set up to occupy the positions which they occupy in the world market by means of official benefits."

"Here," the official continued, "they have been operating for 18 years in a protected market, sheltered by special rules and benefits of different kinds, and they have not been able to come up with a product that can be sold on the world market for reasons of both price and quality. This is the case even though they have at their disposal the cheapest skilled labour."

The seminar is to be charged by Mr. John Boisseau of Tennant Guaranty who is Chairman of the British Export Houses Association's export finance houses committee and the speakers will include Mr. R. Froome, group adviser to Barclays Bank International, Mr. M. A. Maberly, marketing director of Credit Factoring and Mr. T. K. Bridgman, a director of the Credit Insurance Association.

Pre-shipment finance

FINANCIAL TIMES REPORTER

THE LONDON Chamber of Commerce and Industry is organising a seminar on pre-shipment finance on Wednesday, March 22, aimed at helping small and medium-sized companies. According to the Chamber, problems connected with pre-shipment finance are one of the greatest worries for smaller companies going into the export field.

The seminar is to be charged by Mr. John Boisseau of Tennant Guaranty who is Chairman of the British Export Houses Association's export finance houses committee and the speakers will include Mr. R. Froome, group adviser to Barclays Bank International, Mr. M. A. Maberly, marketing director of Credit Factoring and Mr. T. K. Bridgman, a director of the Credit Insurance Association.

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HOME NEWS

CBI to fight State pay-curb pressures

BY OUR INDUSTRIAL STAFF

THE CONFEDERATION of British Industry has set up a working party to prepare a detailed plan to enforce pay limits through public sector contracts. It consists of senior executives from companies with special experience of Government contracting.

As the campaign against the clauses continues Sir Maurice Lyle, president of the Federation of Civil Engineering Contractors, has written to Mr Peter Shore, Environment Secretary, protesting that the pay guidelines clauses are "totally impracticable and unworkable in many respects" and could have serious effects on the civil engineering industry.

The CBI working party is expected to present detailed

arguments about why the clauses are unworkable and what it meets civil servants being asked to give a blank cheque to the Government.

There are 11 members under the chairmanship of Sir John Methven, the director-general. Points they will develop include the difficulty of a main contractor setting the pay levels of all its sub-contractors' employees.

They will say this is impossible.

They will also argue that it would be illogical to expect a small sub-contractor to indemnify a major company

against problems it might cause, and for a main contractor to take responsibility for its sub-contractors' business affairs.

In his letter, Sir Maurice suggests the clause could be made workable if it was limited to the present phase of pay policy end-

State training scheme for accountants

Financial Times Reporter

THE INSTITUTION OF MUNICIPAL ENGINEERS, with 10,000 members, has added its backing to the suggestion that there should be statutory registration for professional engineers.

It dismisses the idea that there should be a register under the Government-sponsored committee of inquiry into the engineering situation—as proposed by the Institution of Electrical Engineers.

The municipalities say "a clumsy and inefficient

method of undertaking the task

gives readily identifiable to the public and employers would

establish a designation which the concept of a limited form of

would assist individuals in their licensing for professional en-

gineers where the health and

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petence."

Municipal engineers back registration

BY KENNETH GOODING, INDUSTRIAL CORRESPONDENT

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British Rail to let part of Euston offices at £3.2m.

FINANCIAL TIMES REPORTER

THE LARGEST office complex available in London, in front of Euston station, is to be let by the British Rail Property Board at £3.2m. a year.

The Euston Square complex has a total office area of 307,000 square feet, of which the British Railways Board is to take 70,000 square feet.

The £30m. scheme has been under construction by Sir Robert McAlpine and Sons since 1974.

Mr. Devine's letter was sent to the editor of the Financial Times, who also knew their way around the public sector.

Firemen face expulsion

Financial Times Reporter

EIGHTEEN firemen in Northamptonshire face expulsion from the Fire Brigades Union because they worked during the nine-week strike. Their jobs are unlikely to be affected, as there is no local closed shop.

FINANCIAL TIMES CONFERENCES

Financial Times Conferences have established a unique authority of their own. Since 1971, 208 conferences have been arranged in 28 countries. Speakers who have addressed them have included many heads and other members of governments and leaders of political, economic and business communities throughout the world. They are recognised internationally as providing invaluable opportunities for informed public discussion of matters of substantial current interest.

Forthcoming Financial Times conferences include

April 3-4	Asian Business Briefing	Hong Kong
April 6-7	The Meade Report and Tax Reform	London
April 10-11	Business and the European Community Directives	London
May 8-9	The 1978 Euromarkets Conference	London
May 15-16	The North Sea and its Economic Impact	London
June 14-15	Paris in World Finance	Paris
June 19-20	World Insurance	London
July 10-21	Financial Management for the non-financial executive	London
August 30-31	World Aerospace	London
October 2-4	Financial Times—Chartered Institute of Transport Conference International Transport	London

To:
The Financial Times Limited, Conference Organisation, Bracken House, 10 Cannon Street, London EC4P 4BY. Tel: 01-226 4382. Telex: 27347 FT Conf G

Please send me further details of ...

Name (Block Capitals Please) ...

Title ...

Company ...

Address ...

Hopes rise of drop in jobless total

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

HOPES THAT the unemployment figures for mid-February published tomorrow will show a decline and possibly a decline in the total have increased after the guarded optimism of Mr. Denis Healey, Chancellor of the Exchequer, last week.

There should be the right of appeal to an outside agent against any decision by the Secretary of State, the points they will develop include the difficulty of a main contractor setting the pay levels of when a decision is made to restrict remuneration or terminate a contract.

There should be the right of appeal to an outside agent against any decision by the Secretary of State, the points they will develop include the difficulty of a main contractor setting the pay levels of when a decision is made to restrict remuneration or terminate a contract.

Moreover, contractors should not be held responsible for nominated or indirect subcontractors, nor for a breach by a direct subcontractor if the contract contains the clause,

says Sir Maurice.

In a speech on Friday, Mr. Healey suggested that "it could be logical to expect a small sub-contractor to indemnify a major company

against problems it might cause, and for a main contractor to take responsibility for its sub-contractors' business affairs.

They will also argue that it would be illogical to expect a small sub-contractor to indemnify a major company

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says Sir Maurice.

In his letter, Sir Maurice suggests the clause could be made workable if it was limited to the present phase of pay policy end-

National Savings bring in £194.7m.

By Adrienne Gleeson

FORTY BROWN shopping bags by the Commission, which has

been seized with documents, seized

power of seizure, but not of

search. Accountants are examining

every document—"a fantastic

job," the Commission said,

indicating that the work would

take months rather than weeks.

There are 5m. Hemerdon

shares in issue. Of this total

1m. are held by Mr. Richardson,

while the rest are held in trust

by a Bermuda bank. Only when

ownership is settled and a dis-

tribution has taken place, will

the company be able to go ahead

with its plans for over-the-

counter trading in the U.S. and

an eventual listing in London.

The problem is that those who

put up the money have not re-

ceived formal proof of share

ownership. This has led to legal

wrangles involving Mr. W. A.

(Billy) Richardson, who first

promoted the company, and

those who provided cash for

the company—the grubstakers.

An intriguing side to Canadian

law has been highlighted in con-

nection with the case of Hemer-

don. The origins of the present

situation lie in a provision of

Ontario law.

PAUL CHEESERIGHT reports on the odd ownership problems surrounding Hemerdon Mining

Attempt to unearth the grubstakers

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counter trading in the U.S. and

an eventual listing in London.

Estimates vary

Mr. Richardson apparently has

a list of the shareholders but so

far has not handed it over to the

company. Since the end of 1976

he has in any case been at odds

with the present management

who wrested control of the com-

pany from him at that time.

Estimates of the amount of

money invested in Hemerdon

over about 15 years while it was

under Mr. Richardson's contr

but vary but average out at between

\$3m. and \$4m. Mr. Carl Schwa

lder, the present chairman of

the company, put up \$150,000.

A list of grubstakers compiled

by Mr. Schwarzer, and another

put together by Mr. Theodore Belman, a Toronto

lawyer, contain about 1,000

names, mostly from Ontario.

Both Mr. Schwarzer and Mr.

Belman want Mr. Richardson's

list but are acting independently.

A Canadian court has

appointed Dunwoody Ltd. as

trustee to act for the grubstakers.

However, the company itself is

not the subject of any litiga-

tion. Indeed, last December it

announced a joint venture with

Amax, a U.S. mining house, to

explore Hemerdon Ball in detail.

COMPANY NOTICES

GM
DIVIDEND DECLARATION

**GENERAL MOTORS
CORPORATION**

Notice to Authorised Depositaries and to owners of
BEARER DEPOSITORY RECEIPTS
Representing units of one twentieth of a deposited share of
Common Stock.

NOTICE IS HEREBY GIVEN that resulting from the Corporation's Declaration of a DIVIDEND of \$1.00 (gross) per share of the Common Stock of the Corporation payable on 10th March, 1978, there will become due in respect of BEARER DEPOSITORY RECEIPTS a gross distribution of 5 cents per unit.

The Depository will give further NOTICE of the STERLING EQUIVALENT of the net distribution per UNIT payable on and after 15th March, 1978.

CLAIM FORMS for completion by Authorised Depositaries only are now obtainable from Barclays Bank Limited (as below) and may be lodged forthwith.

THE CORPORATION'S ANNUAL REPORT FOR 1977. Authorised Depositaries are assisting in the distribution of this report to holders of Bearer Depositary Receipts. Copies may also be obtained from Barclay's Bank Limited.

Barclays Bank Limited,
Securities Services Department,
54 Lombard Street,
EC3P 3AR.

CITY OF HELSINKI

10% 1975/1983 UA 18,000,000

Notice is hereby given to Bondholders that, during the twelve-month period ending January 30, 1978, no Bonds have been purchased.

Outstanding amount: UA 18,000,000.

The Fiscal Agent,
KREDITBANK S.A.
Luxembourgeoise.

Luxembourg, February 20, 1978.

CADBURY SCHWEPPES OVERSEAS LIMITED
US\$30,000,000 7½ per cent. Guaranteed Bonds 1980

Notice is hereby given that Swiss Bank Corporation, 1 Aeschenvorstadt, Basle CH 4000, Switzerland has been duly appointed an additional paying agent.

Cadbury Schweppes Overseas Limited

EDWORKS (1955) LIMITED
(Incorporated in the
Republic of South Africa)

**DECLARATION OF DIVIDENDS—
DIVIDEND NO. 62**

Notice is hereby given that dividends have been declared on the Ordinary and Preference Shares of the Company. The Preference shares are 7 per cent. Cumulative Preference shares of the Company.

a) On the Ordinary and "A" Ordinary shares—an interim dividend of 2.0 cents per R2 cent for the period 1976/1977 per R2 cent or 10 cent share for the period 1977/1978 per cent.

b) On the Ordinary and "A" cumulative preference shares—the dividend in respect of the half year ended 31st December 1976 was 2.0 cents equivalent to 6 cents per R2 share 1977/1978—3 cents per R2 share 1977/1978 per cent.

c) On the Ordinary and "A" cumulative preference shares—a dividend in respect of the half year ended 31st December 1976 was 2.0 cents equivalent to 7 cents per R2 share 1977/1978 per cent.

Dividends will be paid to shareholders registered in the books of the Company at the close of business on 31st March 1978. Payment of dividends will be made on payment thereof will be posted on or about 1st May 1978.

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The Company will deduct the non-resident surcharge of 10% on dividends payable to shareholders whose addresses are in the Republic of South Africa.

The share transfer books and share register will remain open from April 1978 to 7 April 1978, both dates inclusive.

By Order of the Board
D. H. EDGE,
Secretary.

Head Office,
15-17, St. Martin's Road,
Brentford, Middlesex TW8 9SD.
Port Elizabeth, 6000.

Transfer Agents:
Globe Transfer Agents Limited,
10th Floor, St. Mary's Building,
18 St. Mary Axe, London EC3A 1JZ.

Johannesburg: 2000.
London Transfer Office:
6 Grosvenor Place,
London SW1P 1PL.

England: 17th February 1978.

JUDGE CO. LTD.

At a meeting of the Board of Directors of the above Company held on 3rd February 1978, it was resolved that a final distribution of £1.00 per share be made to shareholders of record on 10th March 1978, and that the dividend be paid on 15th March 1978. The dividend will be paid on the basis of one new share for every ten shares then held.

If a depositary receipt of the Company is held by European Depositary Receipts, the dividend will be paid in respect of such depositary receipts in accordance with the terms of the relevant agreement. Legal requirements in Japan necessitate legal requirements in Japan to participate in this distribution through a Japanese Depositary Shareholder. Share is equivalent to one share of the underlying stock. Holders of EDKs can be issued only in multiples of 100 depositary shares. Accordingly, one thousand depositary receipts of the Company will be sold and the proceeds distributed in the usual manner.

Note: EDKs are entitled to receive 10% of the total entitlement pursuant to the free share distribution coupon held by the Company. This is possible after 20th February, 1978 at the Hill Samuel & Co. Limited.

JS. Bisco Street,
Louvain, Luxembourg S.A.,
27, Rue Notre Dame,
Luxembourg.

HEPWORTH CERAMIC HOLDINGS LTD.

Notice is hereby given that the Transfer Books of the above named Company will be closed on 10th March 1978, and that the dividend will be paid on 15th March 1978, exclusive of the preparation of interest warrants.

Gentry House,
Sheffield S10 3FJ.

ART GALLERIES

AGNEW GALLERY, 43, Old Bond St., W1. Tel: 01-529 8175. 1978 ANNUAL WATERCOLOURS. Tel: 01-529 8175. Thurs. until 27th.

COLNAGHI'S, 12, Old Bond St., W1. Tel: 01-7408. A Loan Exhibition of Works by 568 Artists. Tel: 01-7408. FUND. UND. URG. MARCH 1ST. REBATE 10-15%.

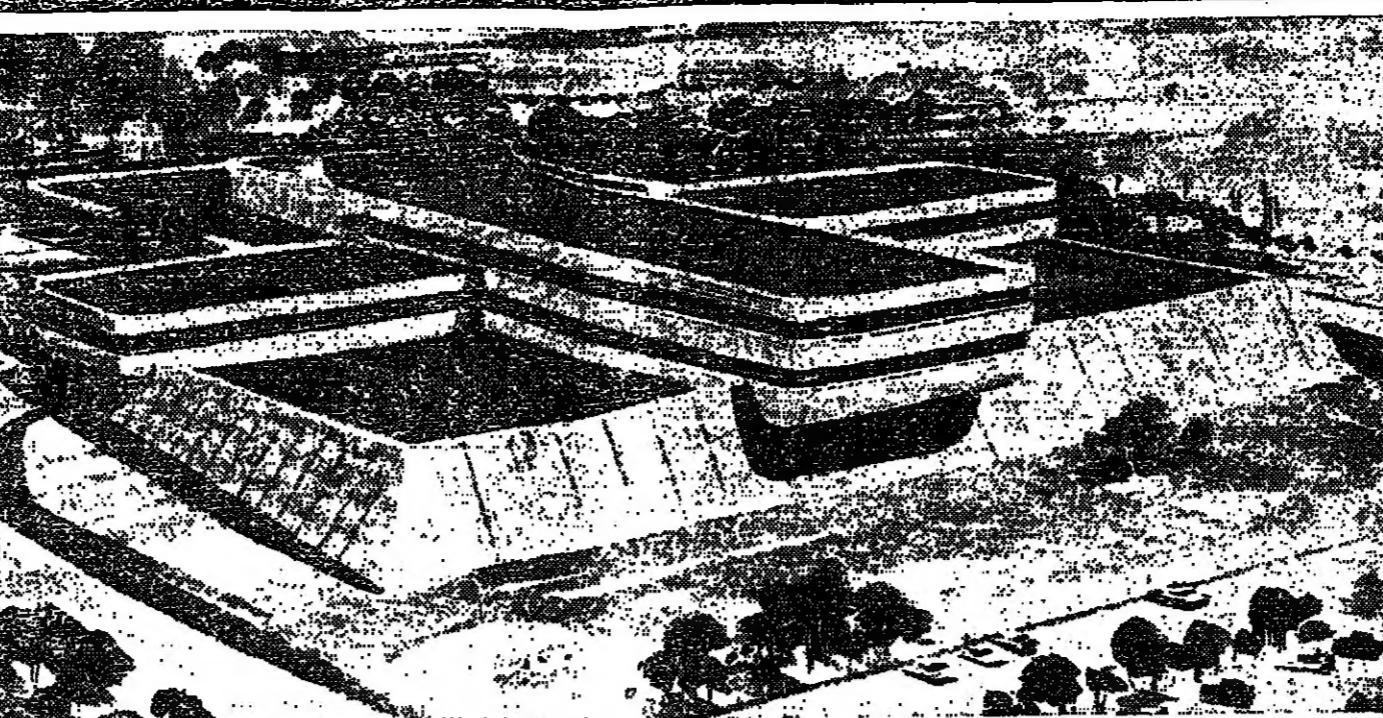
FCI G. GELSER, Exposition of Fine Prints. Tel: 01-7053. British and European Artists. Tel: 01-734 3024. Weekdays 10-6. Sat: 10-5. Sun: 10-5.

WATERCOLOURS ON THE WALL. Tel: 01-651 1000. Annual Exhibition. Tel: 01-651 1000. DATES: Sun: 10-5. Unit 2 March. 1pm. Sun: 10-5.

CLUBS

EYE, 185, Regent Street, W1. Tel: 01-580 1045. 12.45 and 1.45 and music of Johnny Haworth & Friends. NEW SPOTLIGHT, 185, Regent Street, W1. Tel: 01-580 1045. THE GREAT BRITISH STRIP Show at Midnight also 1 am. Mon-Fri. Closed Saturdays. 01-580 6455.

Building and Civil Engineering



Artist's impression of the Midland Bank's proposed national computer centre which is to be constructed in Wentworth Industrial Park (a Henry Boot development) at Tansley, near Barnsley, Yorks. Tenders

for construction of the centre, which will occupy a 10-acre site, have gone out from would-be main contractors and in the meantime Henry Boot is negotiating for the site preparation contract on which

work is expected to start this spring. When completed the centre will have two completely independent computer suites. It is expected to become fully operational in about two years time.

£4m housing University complex for Rush & Tompkins to cost over £40m.

RUSH and Tompkins is to start work soon on a £3.1m. contract for the construction of 169 dwellings in nine low rise blocks for the London Borough of Camden. The site adjoins St Pancras Station and the work will involve construction of retaining walls and operations on railway arches.

At Exeter, Devon, the company has started on a £700,000 contract for 60 flats for the Raglan Housing Association, while up in the north it has gained a £75,000 award from the Cunningham District Council for the modernisation of 100 houses at Irvine, Strathclyde.

TELEMENON (an historic city in Algeria) has been cost. But it is thought to be at a lower level than the original estimate as the site of a major leat \$50m.

The architectural work is to be carried out by the Atkins Group's Consultants, the W.S. Atkins carried out by the Atkins Group's Group, have been chosen by in-house practice, AG Sheppard

Algeria's Ministry of Higher Education and Scientific Research, in collaboration with architectural design and supervision of the construction of Hunter Epstein and

contractors. Plans call for a surveyors.

Atkins is already working on 8,000 students, with associated another major university project in the Arab world—providing halls of residence.

After the design and tender civil and structural consultancy stages, it is anticipated that construction of the medical faculty complex, University of Riyadh, Saudi

Arabia, will begin in 1981. It is, of course, very early days.

Architects are The Golling Melvin Ward Partnership.

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Over

THE AVERAGE DRIVER DOES 10,000 MILES A YEAR
THE AVERAGE VOLVO DRIVER DOES 16,000
COULD THIS HAVE SOMETHING TO DO WITH IT?



Volvo have always been ready to support the motorist.
Right in the back. Where it counts.

When we designed our seats we worked with doctors
who measured the activity of the spinal muscles.

This helped us make the first driving seat with really
effective lumbar support.

But being Volvo we couldn't just sit back and relax. So
for 1978 we're introducing an even better seat.

It's more contoured and wrap-around with a longer
cushion that's raised to give better support to the legs.

We've improved the cushioning and made the head
restraints 50% softer. We've even refined the
lumbar support control.

The way we look at it is this: the more
heart-ache we have, the less back-ache you have.



IT'S GETTING BETTER ALL THE TIME

Technical Page

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

AVIATION

Warns of imminent turbulence

SCIENTISTS from the Ames Research Centre of the U.S. National Aeronautics and Space Administration in California and the National Oceanic and Atmospheric Administration's Environmental Research Laboratory in Boulder, Colorado, are now testing flying an instrument concept designed to give airliner pilots several minutes warning of an impending encounter with "clear air turbulence."

This atmospheric phenomenon has been a problem since the beginning of the jet age. These naturally-occurring tempestuous air currents can add unexpected bumps—sometimes exceptionally severe—to an aircraft's smooth passage, even though the sky is cloudless, causing sometimes injury to passengers. It is because of the possibility of CAT, as it is known, that passengers are advised when in flight to keep their safety belts fastened.

Because CAT cannot be seen, there has long been a need for a simple instrument to detect it in advance. The device now to be tested uses an infra-red water

vapour radiometer to measure the amount of moisture present in the atmosphere. Early experiments have shown that it is possible with this device to detect CAT from 2 to 5 minutes before it is actually encountered, giving the crew time to steer their aircraft round the problem as they would round thunderstorms, and so gain a smoother ride. The Joint NASA and NOAA sets will use a Lear-Jet research aircraft.

The two organisations hope that the flights will lead to development of a low-cost system which can be installed in any aircraft. It would operate unattended and require minimum maintenance. If it is found feasible it will produce a visual signal in the flight deck from four to 15 minutes in advance of a prospective CAT encounter. Both U.S. agencies believe that such a device would enhance the safety and comfort of civil aviation—and also military operations—by giving pilots enough warning of imminent turbulence.

MICHAEL DONNE

HANDLING

Improved skip loader

OPERATING TIMES with an all-up weight of 6.88 tons and a payload of 9.02 tons are 35 seconds for loading and 45 seconds for unloading on an improved version of the Ebro skip-handling equipment for 16-ton gross trucks.

A fast lift-off valve permits off-loading an empty skip in 10 seconds. A redesigned jockey box has reduced rear overhang by $\frac{1}{4}$ inches, and the strengthened jacks are mounted at angle of 12 deg. instead of vertically. The platform now has a uniform length of 10 ft. 4 ins. to suit

short as well as long wheelbase trucks.

Axle weight distribution has been improved by altering the geometry of the lifting arms to lower skips further forward on the platform. Servicing has also been simplified, in particular by replacing the full width hinge bar by outboard bearings at the pivot points.

Maximum lift capacity of the new equipment is 11 tons from the ground and $\frac{3}{4}$ tons from 2 ft. 8 ins. below ground level.

More from the maker at Lever Street, Bolton, Lancs. BL3 6DJ (0204 26888).

Lifts up the workers

LATEST HYDRAULIC aerial work platform in the range made load of tools and equipment to be 450 kg. Engineering has a maximum total of 250 kg. The Aerial 18000, which has a lift height of 18.2 metres, is metre. Controls are fitted in the intended particularly for local cage with a duplicate set on the chassis. Horizontal reach is 10.4 metres. Slew is through 360 deg. A hand pump is fitted capable of stowing the unit if the power fails.

Optional extras include intercom, spot and floodlights, tool boxes and safety belt anchorages. Details from the maker at the Sheepmarket, Stamford, Lincs. (0790 51815).

Capacity is two men plus a cage measuring 0.8 by 2.08 by 1.1 metres. Controls are fitted in the intended particularly for local cage with a duplicate set on the chassis. Horizontal reach is 10.4 metres. Slew is through 360 deg. A hand pump is fitted capable of stowing the unit if the power fails.

Using distributed data processing, the system brings operations under local control so that they become of more practical help to industrial management. The specialist task of providing technical support is left to the computer bureau which backs up the 2903.

ELECTRONICS

Games on a chip

REVEALING that it has now produced over 15m. of its first generation of television game microcircuit chips since manufacture started in 1976, General Instrument Microelectronics has factor. This includes highly taken the trend one step further refined silicon for the manufacture of a game chip that allows images of motorbikes to be driven across the screen.

The circuit generates a tiny image of a motorbike which moves across horizontal "roads" on the screen at a speed determined by a throttle control potentiometer setting. Obstacles, including a line of eight buses, are provided, yielding a total of four games. There is an "easy/hard" switch to select the number of obstacles per track.

The company says it has further games in the pipeline including shooting, games of strategy and games of chance.

The 25-lead package, called

Stunt Rider is officially designated AY-3-8760A and is suitable for both colour and monochrome sets.

More from 1 Warwick Street, London W1R 5WB (01-439 1881).

COMPUTERS

Price change reaction is immediate

COMPUTER control will allow a Sheffield drop-forging company to react to changed steel prices across the whole range of their 3,000 products in less than 30 minutes.

Operating manually, Firth-Derby estimates that such a change previously meant up to three months' extra work for staff at its Darley Dale and Sheffield plants.

At any one time, the firm has about 3,000 "live" part numbers made from up to 200 different materials and sizes. Inflation over the past five years has had a significant effect on internal management costs.

Now, using an ICL 2903, the company can completely update the price of every forging in about 25 minutes. The system used has been developed jointly by Firth-Derby and GMS Computing of Sheffield, both companies within the steel division of Johnson and Firth Brown.

Using distributed data processing, the system brings operations under local control so that they become of more practical help to industrial management. The specialist task of providing technical support is left to the computer bureau which backs up the 2903.

Customers for the 400 and 500 systems, launched in Britain last year, include Trust Houses Forte, EMI and Holiday Inns and in the hotel and catering business DTS, through its UK subsidiary Transaction Data Systems, claims to be lead supplier to the U.K.

It is now attacking the supermarket and department store market: a £1m. system for Habitat involving 148 machines and 8000 stock items will go live in April.

Latest system to appear in the UK is the 310, which makes use of a laser scanner.

At the check-out, the assistant simply passes the customer's purchases over a rectangular hole in the surface of the counter with the barcode label roughly pointing at the hole. The label itself can be in any orientation, and items can be dealt with at the rate of about one a second.

A mirror below the orifice projects a scanned beam at about 30 degrees to the horizontal: the

PROCESSING

Light helps refine materials

THE LASER is taking over from the Bussen burner in the chemical laboratories of the University of Illinois. It is a move which will have important industrial implications in the refinement of chemical substances where purity is the major factor. This includes highly

plified if the wire has to be wound round axial tags.

All specifications can be pre-set such as pitch, winding width, position of tags for wrapping, winding speed, number of turns, etc., with the program fed to the microprocessor either by tape or pushbutton. The machine is said to be suitable for small or medium size batches, as well as for coils which although similar in size have a variety of winding specifications.

Marketing in the U.K. is by Cole Electronics, Church Road, Croydon CR0 1SG (01-686 7851), an R. H. Cole Group company.

In the University of Illinois laboratory, a team led by Robert Gordon has set up a computer-controlled laser system which

bombs substances with powerful light beams. This excites selected molecules and causes chemical reactions. In the process, light is used as a catalyst.

The important aspect of the process is that the laser excites only those molecules which are tuned to its own wavelength: in this way impurities can be extracted from a compound to a level of less than one part per million with very big savings in cost.

The 25-lead package, called Stunt Rider is officially designated AY-3-8760A and is suitable for both colour and monochrome sets.

More from 1 Warwick Street, London W1R 5WB (01-439 1881).

COPING WITH EFFLUENT

Pre-set coil winding

USING SIMPLE tooling, and controlled by a microprocessor, the latest Aumann linear winding machine can accommodate wires from 0.04 to 0.2 mm diameter and produce coils up to 45 mm dia. and 50 mm long. Maximum speed is 12,000 rpm.

A pivoted frame carries 12 coils, and when winding is complete the frame is turned through 180 degrees. Wound coils are unloaded while the previous new set are being wound. Start and finish wires can be automatically wound round radial terminals. A special pivot frame can be sup-

plied from £800 to £860 ac-

cording to size, the lightweight

easy to instal units are avail-

able in 1, 1½ and 2 metre lengths

for filament to processing tanks.

A 1½ or 2 hp electric motor is mounted at the top of a central shaft down which air is blown for discharge through the four arms of a rotating ejector head at the base. This produces a mass of minute bubbles, reducing the level of air-dispersible chemicals in the effluent and lifting solids to the surface.

Sulphide levels in tanning effluent in a 2,000 gallon tank have been reduced in 3½ hrs. from 2,000 ppm to a level acceptable by water authorities, according to

the makers.

Running costs are stated to be two or three pence per hour.

Details from Rizzi (U.K.), part

of Barrow and Hepburn Machinery, 388, Meanwood Road, Leeds 7, (0532 620332).

LIKELY to become a £50bn. industry by 1980, telecommunications is to be the subject of a conference at the Amsterdam Hilton on April 2, 3 and 4 organised by Arthur D. Little.

It will focus on the major competitive issues and market opportuni-

ties in the industrialised countries.

Introduced by Arthur D. Little

senior executives, the meeting

will include presentations by

Valerie Zebedee, Arthur D.

Bjorn Svedberg, president of

Ericsson, W. Dekker, Board

W1Z 6EY, 01-483 6821.

Further details of the con-

ference and registration form

are available from Arthur D.

Little, 100 Newgate Street,

London EC1A 7AA.

Light beam links bid.

RCA has introduced its first of ultra-thin strands of fibres of

optical glass or plastic.

Dr Ralph E. Simon, division

vice-president of RCA-Electro-

optics and Devices, says the

entire fibre optics communica-

tions field represents an annual

sales volume of over \$10m. in

the U.S. By 1983, it is expected

that sales for this segment of

the electronics industry will

grow to more than \$500m.

weight flexible cables consisting

of 100,000 individual fibres.

Optical communications using

fibre optics enable the trans-

mission of light waves from one

point to another through light

guides.

Hydrotransport

The fifth international con-

ference on the Hydrodyne Trans-

port of Solids in Pipes will be

held in Hanover, West Germany,

from May 8 to 11. Organised

by BHRA in conjunction with the

European Institute for Transporta-

tion, it will cover both theoretical

and practical aspects, including pilot

plant studies, applications and

economics.

Among the papers will be one

from Warrendale Laboratories

TRSL and Imperial College,

which indicates that even when

pumping larger particles, overall

costs are comparable with those

for heavy lorries, while a contribu-

tion from the U.S. shows that a

five mile the transporting land

will repay its capital cost in less

than five years.

As an alternative to water

transport in pipes, powders and

particles can be blown along

conveyors.

More from ZDA on 01-499 6636.

COMMUNICATION

Telecoms in Amsterdam

LIKELY to become a £50bn. industry by 1980, telecommunications is to be the subject of a conference at the Amsterdam Hilton on April 2, 3 and 4 organised by Arthur D. Little.

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W1Z 6EY,

The Executive's and Office World

Creating a common culture at IBM

EDITED BY CHRISTOPHER LORENZ

HERE IS a story that has been an "unusual degree," says Professor Leonard Sales of Columbia University Graduate School of Business, who has taught the middle and senior class contacts with the executives of IBM dressed in party. "Their massive commitment to management education and shirt hair, sing special hymns."

Such behaviour may be de- Out of its near 300,000 employees round the world, considered deviant. Rumour has it that the company 35,000 of them as "managers," were written by one of whom 20,000 are in the U.S. founding Watson clan, and their themes urge the IBM does not define a "manager" according to his salary level, or the intellectual content of his work, but according to whether his or her job includes responsibility for a wide range of functions concerned with the supervision of people: their hiring and firing, the formulation and evaluation of a performance plan for each of them, administering their salaries and overall "compensation," and advising them on their career.

Whether the story is true, or ever has been, the point. For in a crude, cynical way it underlines a large, disparate corporate needs to weld its top people her.

IBM to-day this corporate acculturation, the promotion and maintenance of attitudes and procedures, usually done largely through the company, calls management development.

This term is one of the most used in management textbooks, but in use, as in most big U.S. corporations, it is taken to cover any training in skills such as accounting, marketing, program which theoretically concern e to the individual's serial growth. These in- it takes its educational mission, job counselling by man- the company is currently build superior to their ing five structures on a campus- appropriate job like area on its headquarters and job assignments property at Armonk, New York. mance evaluations; and which will be used for nothing the subject of this article else except management education. IBM tion—all 183,200 square feet of y training conscious, to space. Up to now it has used a

wide range of accommodation, some of it rented, at scattered locations in New York and Connecticut.

IBM's educational courses in the U.S. are structured as follows: All new recruits to its management ranks—whether from within the company or outside—must attend a week's intake training within 30 days.

At middle management level, the school covers three periods of a week each. Higher up the ladder there are no fewer than two dozen outside sources, such as the MIT Sloan School of Management, or the Aspen Institute for Humanistic Studies.

As the executive moves upwards, the content of the education subtly changes. Its emphasis moving from the specific to the more general, and finally, touching on such cosmic issues as the course of civilisation itself. But the most valuable stage of training from the company's standpoint is that first week of indoctrination for the tellers who have succeeded in moving from the ranks of the

managed—salesmen, clerical workers and others—to those of the managers.

The course has a strong practical edge. Heavy emphasis is placed on the U.S. equal opportunity laws and other employee rights; on the technicalities of merit pay; and the development of a wide range of communications skills. Participants are also told about the latest legislation affecting handicapped workers, pension and safety rules and about the effect of IBM organisational changes.

Ed Kreig is a medium-sized man with broad shoulders and rimless glasses who talks in a slow, deliberate drawl. He likes words like "fundamentals," and he sees IBM as the creation of traditions in management which have been modified but never corrupted since the tabernacles were laid down by the founder, Thomas Watson Sr. In a company widely reputed on the outside to be a very conformist institution—the "no alcohol" rule on company premises being only the most obvious illustration—Ed Kreig will oddly talk at length about IBM's "respect for the individual"; this is one of the "fundamentals" that the new management recruit must embrace.

In keeping with the "nuts and bolts" approach to its management education, IBM is given a minimum of full-time teaching staff. Some are needed to provide continuity, and to enhance job, his manager, the company, the lecturer's skills: the company prefers most of the

"We are a company with a certain amount of universality to it. The concept of the merit system of pay and promotion exists in Europe essentially as it does in Akron, Ohio. The employee-manager relationship is as important in Israel as it is

in Cleveland. Promotion from has a role to play as teacher. within, another basic tenet, is as How does IBM know that its important in IBM Germany as approach is the best? It goes in Belgium. We believe this to be considerable trouble to evaluate the programmes, using one of the company's favourite tools—the opinion survey. Approximately every two years, each IBM worker is given a chance to state anonymously his answers to a series of questions on how to do business in a highly legislated environment.

Yet these more refined in-

gredients are not the substance of the programme, according to Krieg. "If you depart from the fundamentals of respect for the individual and equal opportunity, the merit system, and good communication skills, the employee's perception of his or her manager is going to determine rate. We've proven that with our employee opinion surveys."

These replies are crucial in line managers. Lecturers on management education that takes place, as well as giving a feel for the results of management development sector. At the higher reaches of the training showed that IBM brass were watering down of them. And what happens then? We say: "Back to fundamentals." It works. It's historic. It's irrefutably correct even the chief executive would be promptly revamped.

Methods

Many large U.S. corporations have approached IBM to enquire about its management training methods.

"People from other organisations ask us to tell them about our pro-

grammes," says Edward F.

Krieg, the company's director of management development.

"After we tell them about our

"nuts and bolts" approach to emphasising basics, they are surprised that's all we do. We don't do a lot of esoteric training. We believe in plain funda-

mentals." The silent or terse physician may, by a solemn shake of his head, a few "tut tut"s and a "humph" or two, create dreadful anxiety in the apprehensive. Examples are so numerous Technical language, without explanation, can likewise be peculiarly pernicious. Of the

attitude, all of which can cause

the ignorant sufferer to be much affrighted and further convinced in his own bleak conceit.

Examples are so numerous

that I can cite a mere handful.

Take callousness. I know nothing worse than placing a large

card above the bed of an aged

few of the more dangerous

samples. If a patient is told

—a desperate revelation to that he is in heart failure,

had diabetes innocens because

elderly females in particular.

Recently I visited an old doc-

tor in hospital. A doctor of fame,

meant that the heart is failing leaked sugar. In the absence

of both for his medical skills and to do it's job efficiently: it does of excess sugar in the blood, as

gallantry, who had been awarded not mean that it is about to with this man, diabetes mellitus

is not present.

Sometimes a patient is told

The patient with a sore

he has a "heart murmur." If throat whose adjacent lymph nodes (commonly called glands) are enlarged, can what? He dismissed my query hotly, adding: "I am then may expect even the boldest patient to develop cardiophobia, are draining the infected area could I have a common cold?" Again, the word "thrombosis" is terrifying because the patient usually thinks only of the dreaded "coronary thrombosis," whereas thrombosis of superficial veins in the legs or arms are as common as they lack importance.

I once saw a pregnant woman who was upset and insulted because she was described on the notes as an "elderly primipara." Being but 31 she was much aggrieved. It is a bad term but merely means that a woman over 30 is expecting her first baby.

The list is endless, but I will close with a tale of misunderstanding. The patient was a fine-looking immigrant. He was much fussed about something until I asked, bluntly: "Just what is bugging you?"

"Well," he burst out, "This fully as a cat lest it jumps morning I went to a casualty violently out of a smouldering

department and the doctor tells bag.

He dismissed my query hotly, adding: "I am then

may expect even the boldest

patient to develop cardiophobia,

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terrifying because the patient usually thinks only of the

dreaded "coronary thrombosis," whereas thrombosis of super-

ficial veins in the legs or arms are as common as they lack

importance.

Now I saw a very worried man recently who had been examined for assurance purposes (upon which a mortgage depended) and had been care-

lessly told that he had "sugar

in the urine" and so had

a diabetic mellitus. In fact, he

had diabetes innocens because

elderly females in particular.

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Overtures from the Orient

by ANTONY THORNCROFT

He needs an excuse to furling of the sign of a horse succeeds in leaving you despoiled of exciting cities in the visually exciting, physically exciting, firmament of an annual arts festival there for their caricatures. Martin Jarvis is perhaps happier at the ability to gain every staff Young Marlow, eyes cast down in front of ladies that the imaginative it is not used to full effect. Michael Culver makes part and Diana Quick is a you hardly think him capable of charming Kate Hardcastle. But the passion of his end: Joanna

Photo: Peter Liddle
George Logan as Dr. Eveline Hinge and Patrick Ryecart as Dame Hilda Bracken

a Warwick provided the ray which is essential to survival by infatuating the by singing for only an audience, by all accounts, in London audiences quite so sensitive, and almost such short shrift American "names," but of Hong Kong is the fad any suggestion that it's incidental, rather out-of-the-a, a one night stop over to somewhere. Rather than performers were applauded even though it seemed to be playing easily than they would in London.

as especially true of *She* for once the older generation Conquer which can all play more at ease, John Savident was not quite at ease with the Hardcastle instructing servants in adapting superbly to the comic scenes of mistaken identities as his wife, Tony Lumpkin who is an ungrateful part but the drunken Ulrik Brendi, the dispossessed former tutor of Rosmer. He over-acted the rest of the cast off the stage. Still both productions were very worth while. They may not have been the most inspired choices but at least they gave the local theatre going public serious classics, professionally done, if lacking a touch of magic. The commercial hit of the festival was undoubtedly Hinge and Bracken who packed out the hall the appearance of which is beyond the comprehension of the evening. But the performances have been quite but impossible to take the plot just the stuff for expatriates, in the cultural life of the colony.

Dunham speaks, and looks beautifully as Rebekah West but was not quite at ease with the part. It was indicative of heibre in Hong Kong that Frank Middlemass won the ovations which ravel up the first half is an ungrateful part but the lumpish Lumpkin who Gerard Murphy is right in playing him less as a clown and more—al lend them more as a spoilt, but ultimately superficial laughter, worthwhile Prince Ra-type. A different company of actors had a harder time of it with began their life in Billing general rather than Rosmersholm. Although written Ralph Koltai's set more than a century after *She*, Ibsen's most dismal play seems light years more removed from our own experiences. That such apparently intelligent people should behave so bizarrely beyond the comprehension of a modern audience and it is all playing have been quite but impossible to take the plot just the stuff for expatriates, in the cultural life of the colony.

al Hall

Vienna Philharmonic by DAVID MURRAY

gnificent sound of the orchestra on Saturday evening, the usual envious thing like that collecting tone, deep, full and round, is to be heard in Festival Hall. By a London strings—very special occasions need to sound ropey; if produce such burnished the circumstances of living were rarely let concert was of course event: any appearance of the Vienna Philharmonic something like a state they had Leonard to conduct them. But of the playing no continuous effort, the 13 Third Symphonies, readings of the works strating and balanced, noticeable idiosyncrasies of his own performance trained. In many ways satisfied to let the automatic run on automatic to speak, signalling a and there for a

special emphasis. No continuous extortions, but sudden whole-body gestures recalled the stop-and-go technique of Balanchine's Webern ballets.

Be assured, nonetheless, the "Eroica" which rightly brought the house to its feet, and at a proper "Allegro molto" which exercised notions of the monumental. The opening Allegro was seamless, though superbly argued: the *Marcia funebre* had assured breadth, but much detailed delicacy too, and the Scherzo was as unforced and the wind section—Bernstein chose to use quadruple woodwinds—came into its own. Solo display is hardly called for, but they fulfilled Beethoven's demands (and Bernstein's) roundly and stirringly—the horns in particular had all the to occupy such seats as members of the orchestra.

In the D major Symphony, the Bank may cleave to the familiar,

but here a full house greeted a supernumerary winds were a but here a full house greeted a doubtful asset. Except in fortissimo, four reeds are not quite new work and two some necessarily more piercing than what rare classics.

The performers were the Allegri Quartet, with a new work by John Joubert of the University of Birmingham's music department. To use the current curious phraseology, his String Quartet No. 2 was "commissioned by the Society with funds provided by the Arts Council of Great Britain." (In former days, to commission a work was to pay for it yourself.) Lasting some 25 minutes, it is music which argues thematically, in a traditional way, and uses as its motto the "Muss es sein?" theme from Beethoven's Quartet, Op. 135.

In four movements, it is fluent, resourceful, and well varied in sound. It has, moreover, that rare quality which one may call musical wit (reminding me of Alan Rawsthorne), by which a composer swiftly confronts you with something which is unexpected but strangely logical. Thus when, after three rather dissonant movements, the fourth begins with relaxed jollity in a major key, it seems no capricious act but a clever, convincing permutation.

I think it unfortunate that this particular "trick" is worked twice, the tune returning later. But the whole work is a welcome addition to the steady and estimable output built up by Mr. Joubert over the past 20 years. By accident or cunning plan, it was well paired with Mendelssohn's Quartet in A minor, where similarly a pre-existent theme (from one of the composer's songs) turns up repeatedly throughout.

In personnel, the Allegri Quartet has undergone several successive changes, though not yet recalling the venerable old bicycle of which only the bell is found not to have been renewed. The present members, well matched, are Peter Carter, David Roth, Prunella Pacey, and Bruno Schrecker. Miss Pacey's predecessor, a viola player, Patrick Ireland, rejoined the group for Mozart's Quintet in D, not so often played and not so deeply touching as the Quintet in G minor, but, nevertheless, serving admirably in this performance to round off a stimulating concert.

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Monday February 20 1978

A chance to kill the Bill

THERE CAN be little doubt that if the House of Commons were allowed a free vote on the Third Reading of the Scotland Bill this week, the Bill would be roundly defeated. It has been clear for many months that the House as a whole either does not like the Bill, or has no interest in it. In fact MPs tend to divide into three groups on this issue. The large majority simply show their dislike or lack of interest by declining to turn up for debates, except when it comes to crucial votes on which they tend to follow the party line. There is a minority which is passionately against the Bill and which has shown, by rigorous attendance, that it is possible to amend it almost at will. And there is another minority, mainly consisting of the Scottish Nationalists, which is in favour of the Bill, but only as a stepping-stone on the road to independence.

Bitter
It is also clear — even more so now than it was at the start — that the Bill has major defects. There are certain key questions about it which have not been answered, and which are perhaps incapable of being answered. For example, is it conceivable that a Scottish Assembly would rest content without the power to raise revenue? Yet no satisfactory way of allowing independent revenue-raising has been found. No way has been found either of reconciling the proposed new level of Government with the existing regional and district authorities. It is arguable that Scotland is already over-governed and cannot possibly be helped by the addition of one more tier.

Not least, there is the so-called "West Lothian question": what are to be the powers of Scottish MPs at Westminster in relation to English affairs when the powers of English MPs in relation to Scottish affairs have been reduced? Again, no answer has been produced, even though it is not difficult to imagine the outcry that would arise if, after devolution, a Government that relied for its majority on Scottish Members attempted to impose its way on purely English matters.

Confidence

The disreputable case for supporting the Bill is that the Government believes that it must do something to buy off Nationalist support in order to maintain its position in Scotland. Even if that reading were correct, it would be only at the price of more trouble ahead. Mr. Callaghan is rightly not making the vote an issue of confidence; he can afford to lose without being driven immediately to the country. Safe in that knowledge, Labour MPs who are aware that the Bill is dangerous can afford to vote against.

China buys Japanese

THE MOST immediately striking aspect of the new \$20bn. two-way trade agreement between China and Japan is that the Chinese leadership now has the confidence and authority to make long-term commitments which run against the grain of much recent policy on the export of natural resources and the purchase of foreign technology. For eight years is a long time in the political life of a nation with as turbulent a recent past as China.

The agreement also reflects Japan's confidence that the new Chinese leadership has the power to carry it through. As a result of the deal the Japanese will be looking in China as a continuing supplier of oil and will now have to invest in expensive refinery equipment to remove its high wax content. The Chinese have not agreed such a long-term trade package since the planned equipment purchases from Russia in the 1950s. Ironically, it is the Russians who have most reason to be worried by the new deal with Japan. For the agreement promises an unwelcome increase in China's industrial strength, and could pave the way for a Japan-China treaty in which the Chinese are anxious to insert an anti-Russian clause that would stipulate that the two sides would oppose the attempts of another power (Russia) to seek hegemony in the region.

Unclear

From the conflicting accounts of the agreement, it is still unclear whether it marks an addition to existing trade or whether China's current sales of oil and Japan's of steel have been included. But the integrated steel mill that China will obtain at Shanghai, the modernisation of two existing steel plants, the fertiliser and petro-chemical plants all present significant additions to China's industrial capacity and technology in areas where at the moment there are considerable shortages. The further attraction to China is that it would have had difficulty in finding \$20bn. of foreign exchange to finance its side of the package outside the framework of a barter agreement with Japan.

The Post Office's dilemma over 'System X'

BY MAX WILKINSON

THIS Post Office's latest £7 rebate to each subscriber in Japan have the DEX 2 attempt to persuade more demonstrated a narrow short-term view of the industry.

Ironically £100m. is the sum allocated for the development of the new "System X" on which future export hopes must be pinned. "System X" is the code name for the fully digital computerised range of exchanges expected to be introduced into service in 1980s.

On the one hand, the companies which supply exchange equipment and employ 65,000 people desperately need the Post Office to move quickly into a new computer-based switching system.

The speed of the Post Office's change will largely determine whether they have a suitable product to catch the world markets in the 1980s, and whether they can keep their labour force at reasonable levels. Because of the huge costs involved, Post Office sponsorship is the key to their development programmes. On the other hand, the Post Office has to consider the interests of subscribers in keeping costs, and therefore tariffs, as low as possible.

The multi-billion-pound investment needed to replace the present Victorian technology with computerised equipment is certain to push up telephone charges if it proceeds too fast.

For the Post Office "too fast" means faster than the rate which can be justified by the expansion of the system and a normal replacement programme for old exchanges.

The trouble with that course, however, is that it stores up trouble for the future. The 40 per cent. clause will make the referendum campaign even more bitter, as the SNP strives to bring out the vote and at the same time alleges that the rules have been rigged. What will happen if the majority falls just short? And even if the majority is adequate, the objections to the deficiencies of the legislation would remain.

Confidence
The disreputable case for supporting the Bill is that the Government believes that it must do something to buy off Nationalist support in order to maintain its position in Scotland. Even if that reading were correct, it would be only at the price of more trouble ahead. Mr. Callaghan is rightly not making the vote an issue of confidence; he can afford to lose without being driven immediately to the country. Safe in that knowledge, Labour MPs who are aware that the Bill is dangerous can afford to vote against.

Unfortunately, there is no magic formula which will match the rate of investment determined by the Post Office's traditional criteria and the speed of development which the manufacturers must achieve if they are to obtain any place at all in the world market. In deed, the rate of expansion of telephone traffic has slowed in the international arena, while elsewhere have been contested at least five years behind their

Arabia, Australia, Korea and Standard Telephones and Cables Plessey and the U.S.-owned Standard Telephones and Cables

Post Office has made a series of disastrous decisions which left the General Electric Company, as if System X could take twice as long.

Since the 1950s, the Post Office has made a series of disastrous decisions which left the General Electric Company, as if System X could take twice as long.

The change-over to a computer controlled system is not required merely to keep up with international fashion. The invention of stored program control was one of the most important developments in the history of telecommunications.

British companies watched history of telecommunications helplessly from the sidelines, or it offers the prospect of a cheaper, more efficient and much more flexible telephone service. The Post Office will certainly need it at some stage, particularly to cope with expansion — for one thing it takes up far less space — and partly to replace the outdated Strowger mechanical switches which date from the nineteenth century.

All these contracts have specified the new type of "stored program control" (SPC) switching. This is a radical advance for the Strowger electro-mechanical switches which date from the nineteenth century.

The difficulties of designing Even the most advanced British electronic exchange, the TNE2, are enormous, and there have not been a number of disasters in

Following the introduction of the early stages of most systems, stored program control by Bell in America in May 1965, large numbers of different programs can operate extremely fast and require very little maintenance.

Dr. Kenneth Corfield, managing director of Standard Telephones and Cables, has the simultaneous conversations. Un-

In addition Siemens of Germany is developing the EWS different programs all start simultaneously and require

getting mixed up and different national exchanges and require

MEN AND MATTERS

Keep smiling in Whitehall

Naturally enough, inflation has left its mark on the cost of the Prime Minister's own staff, as upon wages everywhere. In a written answer in the Commons last week, Mr. Callaghan disclosed that in 1974 the total bill for such staff was £234,000, whereas in 1977 it was £233,000. The numbers were much the same — 71 last year compared with 68 three years earlier, but only one part-timer instead of three.

So the average pay of prime ministerial aides has gone up from £5,441 a year to £6,126. The latest figure may seem quite a lavish average to the man in the street, but then one cannot blame Jim for wanting the best. But it does represent an increase of 78 per cent. The average national wage in April 1974, was £41.70 a week; in April 1977 it was £70.20. That was an increase of 88 per cent. Nice to know that Downing Street is setting such a good example to us all.

Bosses' boss in France

If the French left wins next month's elections, the view from the top floor of number 31, avenue Pierre I de Serbie, will be distinctly murky. It is perhaps because of his talent for feeling his way forward in gloomy surroundings that Francois Ceyrac has been unanimously appointed head of the national employers' federation, the Patronat for an unprecedented third term. Since 1973 he has managed to steer between the aggressive small business lobby and the big conglomerates heavily represented on the Patronat's governing body. This is the U.S. innovation whereby advertisers can call every number on an exchange



"Now Jim is threatening a 'Buy British (Scottish Exported) Campaign'."

dialogue with government and unions about industrial and social reform. Now 65, and with a deeply-lined face, he was born in the Correze, poor region of south-central France. Since the murder of his German opposite number, Hans-Martin Schleyer, he has had a bodyguard on permanent orders.

Predictably, Ceyrac has been bitterly condemning the economic programmes of the Left-wing parties. But he is also warning the present government that it must stimulate faster industrial growth to combat unemployment among the young. Whatever happens at the polls, the man the French papers call the "boss of the bosses" is certain to find his third term the toughest of them all.

Don't call us — we'll call you

The Post Office has shaped up to the looming menace of "sequential diallers," to which I all seem coy about admitting that they want to win one of those Californian holidays being offered by Lloyds. To avoid making things too easy for the sixth-

THE DIFFERENT TYPES OF SWITCHING

• **STROWGER**, or "step by steps" invented in the last century, and still manufactured, are reasonably reliable and efficient but slow in operation and expensive to maintain. The digits dialled on the telephone receiver send pulses down the wire which activate electro-mechanical switches one after another until a complete connection is made. A delay between dialling and connection is inevitable while the switches are setting up the call. Contacts must be cleaned frequently and the mechanism kept free from dirt. Strowger exchanges are bulky and require intricate wiring networks between racks of switches.

• **STORED PROGRAM CONTROL (SPC)** is the use of computers to control exchanges. In traditional systems, the dialled pulses are used directly to open and close switches to connect calls. In the most modern of these systems, sophisticated electronics interpret these pulses and re-transmit them to the various exchanges through which the call will pass. SPC, however, replaces these control mechanisms with a computer. The number dialled by a caller goes straight to the computer, which calculates the best route for the calls and sends out appropriate instructions to the switches.

This system is faster and more flexible, because the computer can instantly calculate the best route for a call when the lines are busy. It consists of a grid of horizontal and vertical bars which both have switch contacts at the crosspoints. Contact is made at only one crosspoint when a vertical and a horizontal bar is given a half turn. Crossbar exchanges are more compact than Strowger and allow more rapid control of switching sequences.

• **CROSSBAR** was the next development of switching technology widely introduced in many countries during the 1950s and 1960s, but not to any great extent in the UK, where the Post Office made a disastrous attempt to leapfrog into the electronic age. It consists of a grid of horizontal and vertical bars which both have switch contacts at the crosspoints. Contact is made at only one crosspoint when a vertical and a horizontal bar is given a half turn. Crossbar exchanges are more compact than Strowger and allow more rapid control of switching sequences.

• **REED RELAY** — The most recent development in conventional switching has been to replace the mechanical bars and switches with miniature metal springs or "reeds" enclosed in glass bubbles. An electro-magnetic wound round the bubble pulls the reeds together to

connect speech paths. Reed relay exchanges are still smaller than Crossbar, and because the switches are enclosed, require less maintenance.

• **DIGITAL SWITCHING** represents the complete integration with computer technology. SPC is only a computerised way of controlling switches. Speech is conveyed between telephones by ordinary electrical currents (analogue signals) which exactly mirror the vibrations of the voice. In a fully digital exchange, however, these analogue currents are converted into a series of "digits" or beeps. The beeps are the same as the signals used by computers for their internal operation. Conversations coded in a digital form can therefore be routed to different destinations by an internal switching system within a computer. These switches are millions of times faster and millions of times smaller than the older electro-mechanical switches. Moreover, they are connected on tiny micro-circuits with hardly any wires between them.

• **PRESENT SYSTEMS** — All existing SPC systems in Europe including Ericsson's AXE, Philips' PRX and ITT's Metaconta combine computer control with analogue switching, mainly using reed relays. The British Post Office's System X will combine SPC with digital switching although analogue exchanges may well be incorporated into the system in the early stages.

On the other hand the record on System X so far is not encouraging. The Carter Committee reported: "The situation as it stands is not encouraging. The three manufacturers are not a natural team. In particular, the British owned firms (GEC and Plessey) are suspicious of co-operation with the American owned STC."

"The project is falling behind schedule retarded by a complex apparatus of committees and discussions. Minor details are still to be worked out, and the conversion at high level in the Post Office. Crisp and final decisions on specifications are difficult to obtain."

These delays are occurring at a time of unprecedented advances in component technology. Computers the size of a filing cabinet in 1972 will be etched onto silicon smaller than a postage stamp in a few years time. Prices of processors and memories are continuing to tumble, while their reliability increases. Consequently designs which have too long a gestation period risk being obsolete before they are tested. To be in the race at all, manufacturers must be continually jostling among the leaders.

But in spite of its advanced concept, System X is in development, and a top company to have a substantial number of fully digital exchanges in service is the giant AT and T in the U.S.

One of the major uncertainties about System X is whether the formidable difficulties of stored program control and of digital switching can be overcome by the research teams in one simultaneous jump.

On this point, Plessey, for example, is moderately optimistic. It points to the successful development of the British military communications system called Ptarmigan, which is fully digital and computer controlled.

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FINANCIAL TIMES SURVEY

Monday February 20 1978

Freight and Transport Systems

In all the main sectors world transport is having to cope with a welter of change — a problem not eased by the recession. An increasing degree of regulation seems to be a distinct probability throughout.

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N Hargreaves

Correspondent

IN THAT trade pressure is a symptom of a healthy economy, it is no surprise that the last year has seen symptoms spread. Transport is no exception from the efforts of independent oil tanker owners, a chronically over-drawn market to the argument of British hauliers in favour of a tougher licensing system. 1978 looks like being led by a succession of tax increases.

fact that some of these firms assume the status of bloodied international confrontation whereas others merely tiffs between sections of one domestic industry represents a difference rather than a type.

arguable, however, that

transport industries regulation of competition at least to a degree unsuccess-

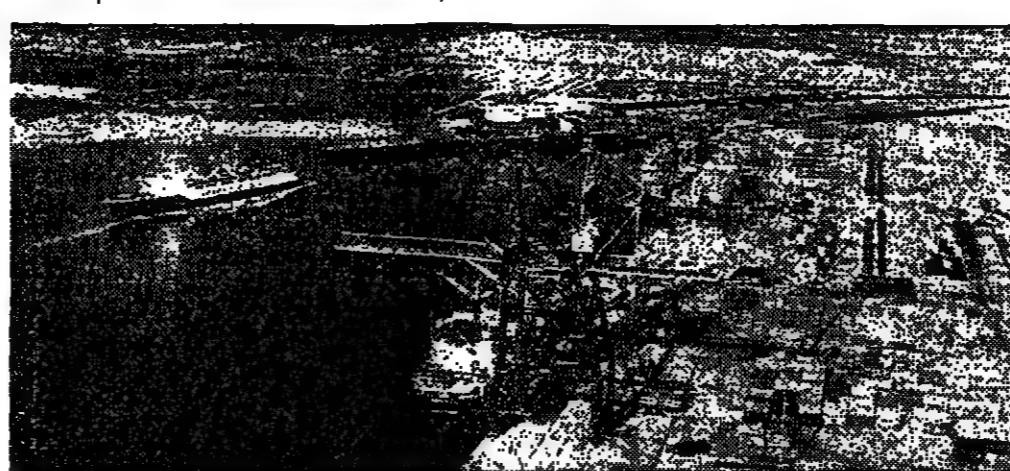
ful. Within air notion of cargo preference for transport, such regulation is oil trades. Cargo preference, accepted on the grounds of safety and the need to give carriers some assurance that very large capital investment will not be jeopardised by the excess of competition. This is not to say that the forces of regulation may not occasionally be subject to criticism.

Elsewhere in the shipping industry, European governments are talking of regulatory ways to halt the expansion of the Soviet incursion into liner trades. Then, although it does not come under the strict heading of regulations, the growing Government involvement in the financial support of shipping, as in Norway, or in the connected area of shipbuilding, in almost every nation possessing a shipyard, both mean a louder government voice in the way things will be run. The fact that developing nations have become particularly fond of creating State shipping lines means that the private shipowning sector is bound to go on declining.

Burden

These developments mean a great burden of responsibility on national governments and on their supra-national equivalents to get their relationships with the freight transport industry right. The penalties of not doing so are obvious enough. Britain's transport users alone spent over £10bn. on goods transport last year and any unwarranted interference with the efficient movement of industrial goods has serious consequences for the consumer.

At the same time as the U.S. authorities have supported the anti-trust zeal of the Grand Jury, they have toyed seriously with a



The French port of Dunkirk-West, with car, train and container terminals linked to U.K. ports like Dover, Harwich and Felixstowe.

would cost the company £16m. contemplate. West Germany, with its £2.4bn. a year support in extra stock requirements.

As the pace of freight throughput, from merry-go-round coal wagons to self-packaged supermarket goods, is in case in point. For the foreseeable future, the argument is going to be about whether there should be a quota system, but simply how it can be operated most fairly.

The other big European road haulage issues—lorry drivers' hours and maximum vehicle weights—present bigger challenges still. The first has been more or less resolved, with Britain accepting a three-year phase-in of the eight-hour day from last month, but the associated issue of compulsory tachograph continues to divide Britain and Ireland from the rest of the Community. At least in the opinion of many in the British industry, this is a case of the Community enforcing uniformity on a purely domestic matter which has no bearing on the consequences of international regulations for oil tankers, recently proposed by the U.S. to IMCO would have been a 2 per cent increase in the price of oil.

Although principled debate on the subject of freedom of competition is at the heart of almost every EEC proposal on transport matters, the parallel requirement for fairness creates endless problems. In theory, the system of a quota or road haulage permits, administered almost entirely on a national rather than a community basis, is a nonsense, but it is a non-sense with no end in sight because the penalties of giving the European motorways is more than a number of nations dare intra-Community movements.

A solution on vehicle weights seems some distance away, with permitted gross weights varying now from 32 tons to 44 tons. Meanwhile the truck producers are becoming increasingly transnational and the freight carriers more committed to inter-modal unit road traffic. Both would benefit considerably from harmonisation of weights.

Railways

When it comes to railways, the Community has made virtually no progress, which is a pity if only for the lack of consideration it implies for the degree to which railway financial problems dominate the minds of several member governments. Britain's Transport White Paper last June was the first for some time not to have been sparked off by a cash crisis at British Rail.

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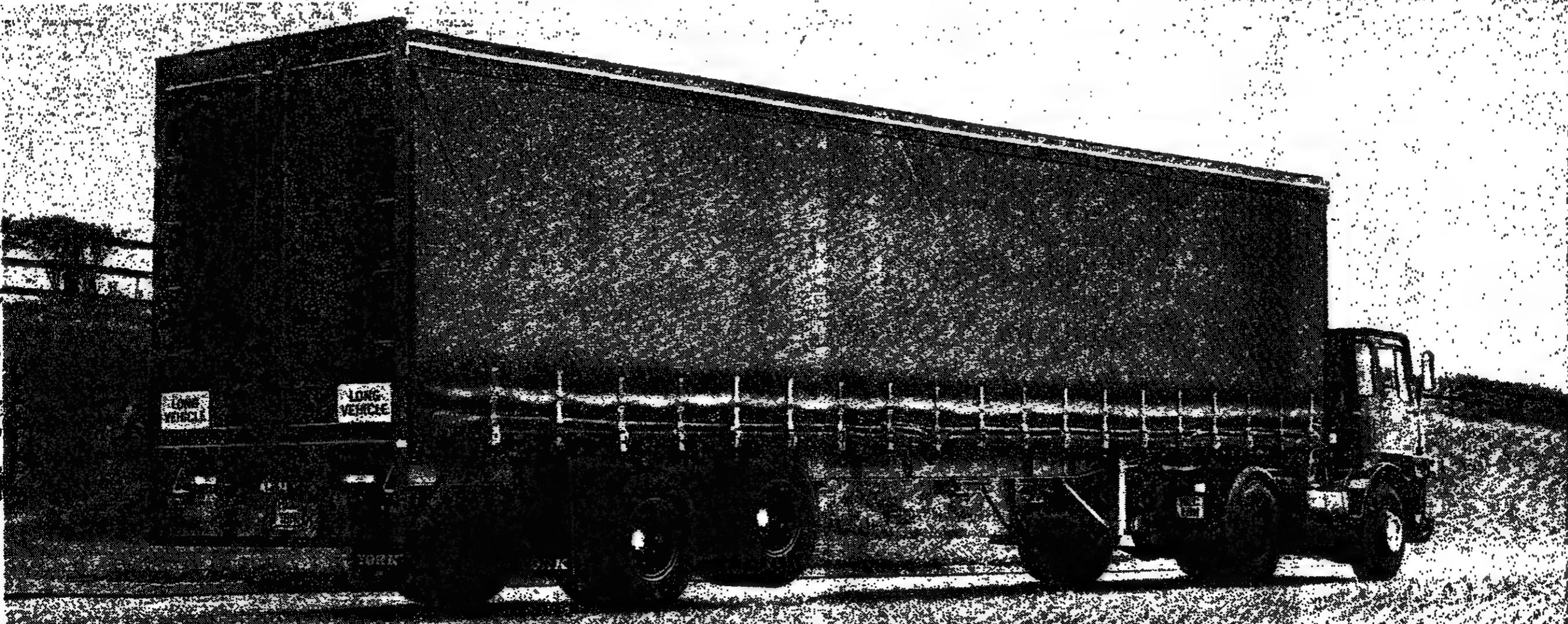
Shipments to their shipbuilders—a flow which in the view of the shipping industry is having a disastrous effect in delaying the re-balancing of supply and demand in shipping markets.

Of course it is possible to take all this cloak of regulation too seriously. Transport operators, freight forwarders and their customers are able to circumvent many requirements of even the most determined bureaucracies. An example of an official exercise which proved to be largely pointless was the "little Neddy" report on transport to the EEC last year.

This document, although accurate enough in many of its observations about the trend towards transport and the need for industry to grasp this trend, had almost nothing to say by way of conclusion. Its suggestion that carriers should make sure they offer clear, door to door delivery terms, partly in the interests of balance of payments gains, was interesting, but is not likely to be much needed by operators.

In shipping, the EEC is only just beginning to consider the idea of some sort of all-embracing marine philosophy, but it will probably not get through 1978 without divisions over the UNCTAD liner code coming to the fore. This is mainly an issue of straight self-interest between community members wanting more cross-trade and the larger cross-traders like Britain not wanting to sacrifice what they have, but it is one where the Community would do well to be able to present a united face to the developing world.

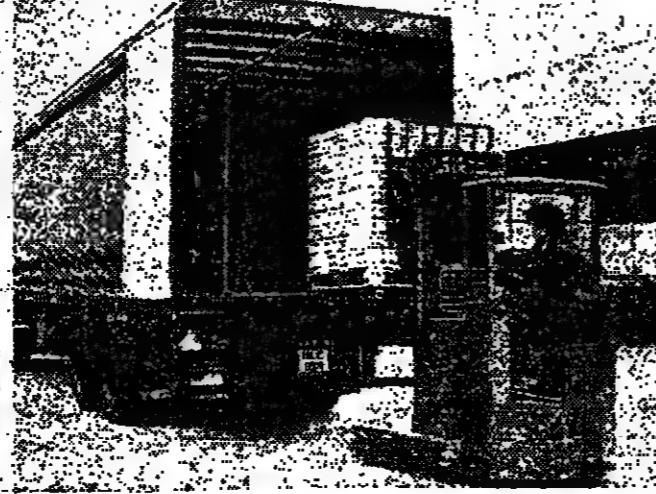
Shipowners themselves look most urgently to the Community in 1978 for some action to stem the flow of grants and cheap suggest a wider role for rail in credit from member Governments.



The easy loading of a platform with the protection of a van and the reliability of York.



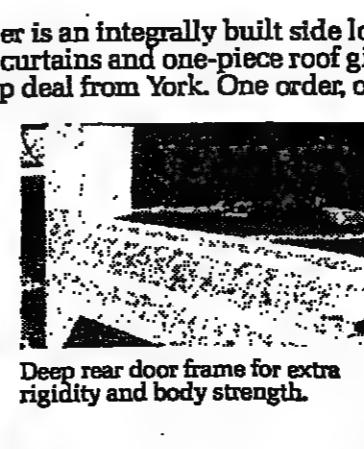
Impeded side loading through the heavy duty 9oz PVC-taped polyester curtains. (The four sturdy roof supports are only spaced along the centre line of the trailer.)



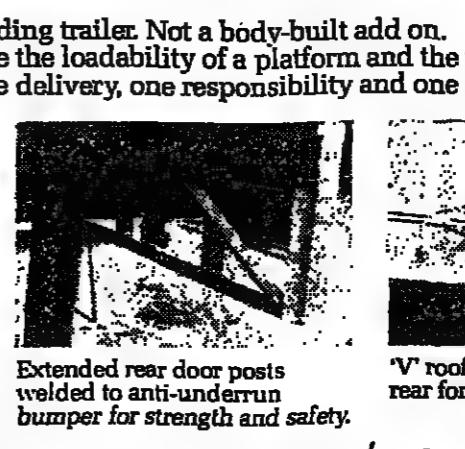
Rear-loading through optional container-type double doors. (Note: raised rear header for extra internal cube.)



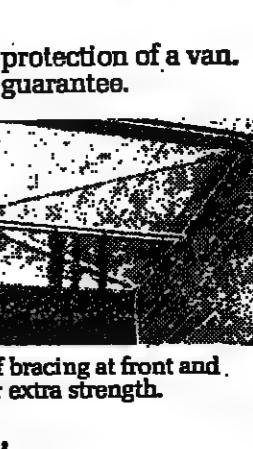
Quick release straps and ratchet operated horizontal tensioning eliminates billowing.



Deep rear door frame for extra rigidity and body strength.



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Vogue for package deals

FREIGHT TRANSPORT had one of the fastest growing carriers. In Britain and in the world generally. The rate of increase has slackened or disappeared altogether during the post-1973 world economic recession, but in the 1950s and 1960s, according to some estimates compiled by the Transport and Road Research Laboratory, the total world demand for freight transport—as measured by the somewhat unsatisfactory yard-stick of ton-miles of work done—was probably growing by almost 8 per cent a year. This was faster than the increase in both world population and world income during the same period—and faster too than the growth in passenger transport as measured by the total volume of passenger-miles.

This rate of increase was not all that surprising. The 1950s and 1960s witnessed the longest sustained wave of economic expansion the world has so far seen, and the most notable feature of that expansion was the vast growth in trade between countries, and especially between the industrialised countries. Whereas internal freight movements tend to grow in volume in rough correspondence to the growth of a national economy—subject to the evolving changes in the location and techniques of manufacture—the volume of international freight movement will be affected by the volume of international trade and the distance between trading partners.

As one might expect, this expansion has been accompanied by marked technological and operational changes in freight transport systems. The shipping industry has invested in large bulk carriers to move oil and an increasing range of dry cargoes. It has converted most of the world's major deep sea and short sea routes to container and other utilised cargo handling methods. The ports have invested heavily in new and more efficient berths and cargo handling capacity to match the changing techniques and volume of maritime freight movement. In the air, the development of air freight has created an entirely new competitive mode large enough to justify the design and operation

of large specialised jet air services. On the railways, freight handling systems have been transformed by the adoption of container and other full-train load systems and by improvements in signalling, communications, and motive power. On the roads, unit costs have been reduced by heavy investment in new tribution services. Several U.K. road systems and by the design firms are also offering special larger, more efficient trucks with bigger pay-loads. Pipelines different parts of Africa.

The railways, both here and on the Continent, have meanwhile been vastly improving their cross-Channel container and full train load services. In journey times and cost these services have become much more competitive in recent years, for shipments of a size, loadability, distance and route suitable for rail hauls. In some sections of the market, too, the cost and delivery times offered by road-air-road services have become highly competitive.

For British freight carriers and forwarders Western Europe provides the biggest single market. It is now the source or destination of just over half of Britain's total visible trade, as against barely a quarter two decades ago. It is one which, because of the application of roll-on, roll-off techniques to surmount the sea barrier and because of the relatively short distances involved, lends itself most readily to exploitation by road based freight systems. In the last ten years the total road tonnage crossing to the Continent has grown from barely half-a-million tonnes a year to more than 13m. tonnes.

This does not mean it has been an easy market to break into or to make a profit out of. Several haulage companies, including some of the biggest in the land, have burnt their fingers. And there has also been (IMD) to suggest that U.K. industry was spending £1bn. on the perennial problem of acquiring licences to operate—both more than it needs to on storage and materials handling.

MANUFACTURERS TO-DAY handling systems and investment in training has been around for many years yet has not made too much of an impact in Britain, possibly because of union resistance to do most of the jobs. In specialised areas it will be justifiable to try out the new and grand concepts which appear from time to time from basic or applied research. But for a distributed in the U.K. by the H-Racker developed by Barlow Handling for pallet picking full loads and order picking individual items to and from the pallet. The H-Racker embodies the principle of elevating the cab of the vehicle with the operator. He can store and retrieve complete loads up to 3,000 lb at lift heights of up to 40' feet in aisle widths of 57 inches, depending on pallet dimensions. The "walk-through" cab allows the operator to stand close to the racking and pallet to select individual items.

A method of safely lifting a man into the air on the forks of a lift truck was one of the "top ten" items of equipment nominated by *MATERIALS HANDLING NEWS* last month. The magazine monitors readers' inquiries it receives about new products and one of those which claimed attention in 1977 was an attachment from E. V. Leonard which is secured to the forks and used as a maintenance platform. The manufacturer or plant before they order it stresses it is not an order for themselves. But obviously, as the MHN experience shows, it is still possible to succeed with something completely new.

Sad to say, customers tend to regard technological developments in the mechanical handling sector conservatively—they prefer to see equipment working in someone else's warehouse or plant before they order it for themselves. But obviously, as the MHN experience shows, it is still possible to succeed with something completely new.

Kenneth Gooding

In the warehouse the Another idea which appealed materials handling industry is to MHN readers was the Modular Distribution Systems' Transfer Frame. These are lift frames with built-in hydraulics developed for Elida Gibbs, Unilever's toiletries subsidiary works out. Probably the most highly automated plant of its kind in Britain, on the goods inward side there will be a fully-automated Teletrac train system to convey pallets, with transfer to driver-controlled loading trucks to put the goods into the correct pallet bay for order picking.

Capacity

Lift capacity is up to 20 tonnes, operation can be carried out on rough or smooth surfaces, level or sloping. Displaced loads can be coped with and the manufacturers say bumps by vehicles have been shown not to dislodge the frames which can travel with a container.

At last year's Movement 77 exhibition, SI Handling launched another idea—called itemetric for automatic order selection of single items. This is ideal for any distribution centre handling small packs—toblettes, pharmaceuticals, films, tobacco products and so on.

The claim is that it is an economical and practical way of having automatic order selection of items of both regular and irregular shapes in less-than-full case quantities.

Another product which caused some favourable comment in the materials handling industry and which was introduced at the show was the Hi-Racker developed by Barlow Handling for pallet picking full loads and order picking individual items to and from the pallet.

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Kenneth Gooding

Materials handling equipment

Specialised

As a result of all these developments, freight transport services have become increasingly specialised and the different modes have increasingly become complementary. That does not mean competition has become less intensive. Far from it, both within and between modes. But the services on offer have become not so much transport services using distribution services using more often than not, more than one mode or type of service. In short, inter-modal operations are becoming increasingly predominant. Just as road carriers in this country are offering highly specialised services for, to take some examples, moving fashion clothing or refrigerated foods or complete distribution services including storage, warehousing, and stock control, so freight forwarders and other transport interests are providing inter-modal door-to-door services for exports.

P. & O. Ocean Transport and Trading, Britain's two largest shipping groups, have bilateral inter-governmental agreements with example diversified into a wide range of other transport activities, including international freight forwarding, road haulage, air freight, and land distribution services. Many U.K. road hauliers, both large and small, have moved into cross-Channel operations, acquiring a substantial share of that market.

Under the EEC Community age and materials handling. Much of the needless expenditure could be cut by the introduction of better handling methods rather than the purchase of new mechanical handling equipment, according to the survey.

But that concentrated only on waste. If manufacturing industry should be a fringe of black dust is to improve its efficiency, there will have to be its own small crane investment in reliable handling equipment, investment in data unloading without other human aid on the Middle East run.

Compare To develop his point further, you have only to compare the number of lorry-mounted cranes in the U.K. with those seen on vehicles in Continental Europe to understand just how far Britain has to go before getting the full benefits of this mechanical handling device.

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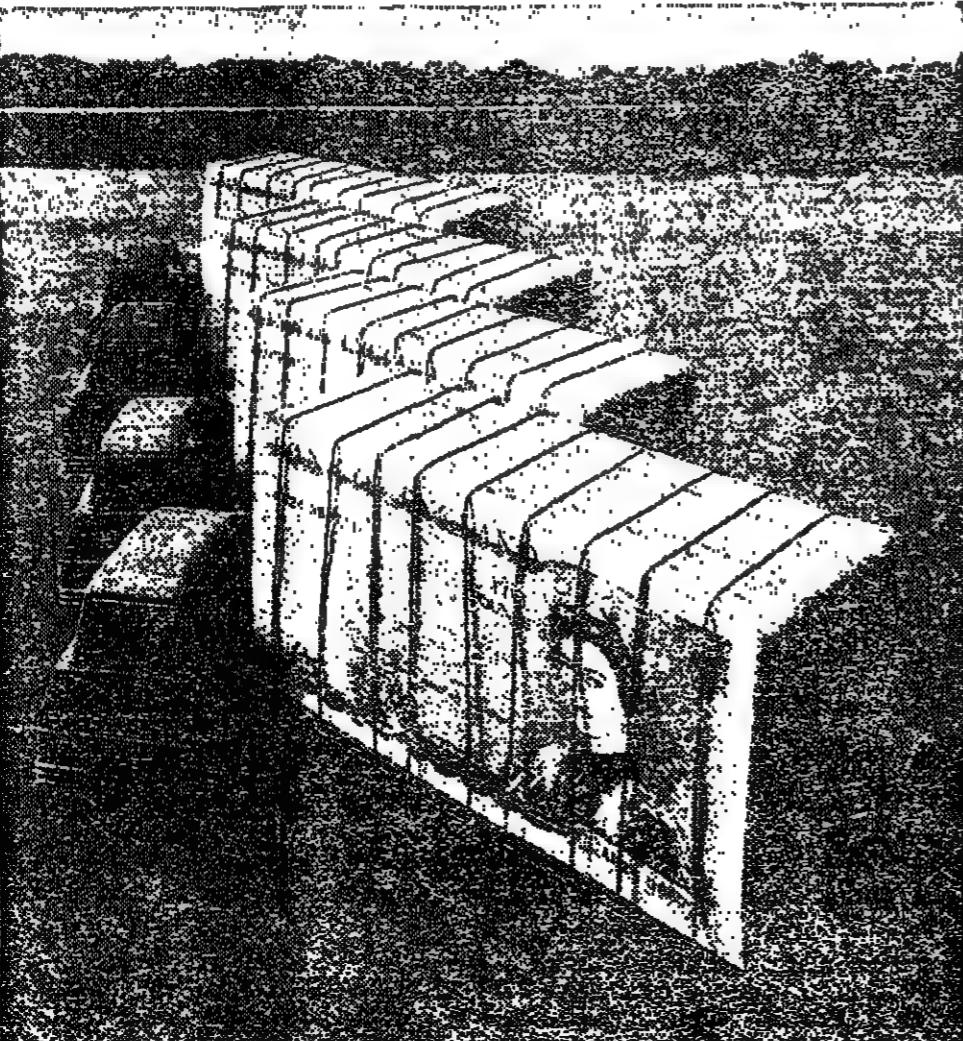
Britain is represented in both these product areas. Ferranti Engineering, a recently-formed subsidiary of the Ferranti group, is making straddle carriers, while Lancer Boss has gained a worldwide reputation picker so that the truck should for its side-loaders. These machines helped the container form is raised. It also says the revolution on its way at the safe maximum working height of 16 feet.

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Kenneth Gooding

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WITH THE first oil due to arrive at the Sullom Voe terminal in the Shetland Islands by the Brent system, and Piper and Tartan among others to the Frigg line. This limited first stage appears to be necessary if oil companies are to avoid flaring and wasting natural gas. Much of the gas will be produced along with the oil. A number of the fields that could be brought into the initial first phase of the programme are due to come on stream in the next couple of years so the limited transmission of liquids and gases.

Oil flowing through these pipelines will eventually turn the Sullom Voe terminal into the biggest of its kind in Europe. The first oil through the terminal will come from the Ninian Field's southern platform, some 100 miles to the north-east of Shetland and this for the pipeline industry, but will then be followed by production from the Heather Field.

Two years ago. Their report suggested that a fairly comprehensive gathering system capable of handling between 1bn. and 1.5bn. cubic feet a day of gas will be built quickly if the Government is to avoid further flaring.

This part of the project might be approved in the first half of this year so that it could be in operation by 1980. Even the mini-network will represent an important business opportunity for the pipeline industry, but major questions are still to be answered. It is unclear as to who would pay supplies from the Brent Field, for the network and who would be the largest discovery in U.K. waters will arrive.

By the time the U.K. reaches self-sufficiency in oil in 1979-80 the most of its supplies will be escalated dramatically since the flow ashore through first evaluation was carried out hundreds of miles of pipelines by Williams Merz nearly two years ago. Their report suggested that a fairly comprehensive gathering system capable of handling between 1bn. and 1.5bn. cubic feet a day of gas will be built quickly if the Government is to avoid further flaring.

Considerable though these achievements might be, however, they pale when put against the ambitious £5bn. pipeline scheme to collect North Sea gas from many pockets around the North Sea, which is currently being studied by a company set up by the Government. Gas Gathering Pipelines (North Sea) is a consultative company with both private and State-owned interests.

So the scheme that is now being evaluated could include the construction of a new trunk line running from St. Fergus to a point north of the Forties Field. From here one line could be recommended that a start should be made on the first 16 such as Maureen, Brae and Thelma and others close to the U.K./Norwegian median line.

More time might well be needed to study the merits of a towards the Lomond Field. One much bigger collection system, of the major problems, however, but it seems almost certain that is that the reservoir character of the Government will sanction the construction of an initial be tapped by such a network system based on the Frigg gas are all different, and so at this line already in operation, and stage it is difficult to foresee the Brent gas line that is now what type of pipeline might be under construction.

This initial programme would involve the building of spur pipelines might at first sight

appear to be the most promising way of collecting the gas from as part of the £5bn. scheme as the many different fields, but the new gas trunk line has been included that would run through Britain with a cross-Channel link to France and Belgium. This would give the Norwegian access to the offshore and Freece Cardew energy-hungry continental market.

The existence of North Sea oil and gas is of major importance for the pipeline industry, and just on the basis of existing programmes the network should reach 2,000 miles by 1980. Unfortunately from the U.K. balance of payments point of view only a small percentage of the main offshore pipework has been manufactured in Britain. However, British Steel's final entry into the market for heavy pipes presumably influenced by the possible gas gathering network should ensure that a bigger percentage of future work remains in the U.K.

Offshore the U.K. is slowly moving towards the point where the Norwegian sector could also it will eventually have a pipe-

CONTINUED ON NEXT PAGE

Computers—can they deliver the goods?

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FREIGHT AND TRANSPORT SYSTEMS III

Bemusing choice for users

EMOTION, storage, and handling of freight is a large business and a major element in industrial costs. Reliable transport and distribution facilities may be a factor that is taken into account, especially if the supplies required or the products to be made are likely to pose a problem—as, to give an extreme example, at a steel works or power station.

Consideration may even be given to the question of whether it is worth going on running one's own distribution fleet rather than contracting more of the business out, particularly in these days of increasingly onerous penalties for faulty maintenance or operation of lorry fleets. But, generally, there is still a widespread tendency to regard transport and distribution as a compartment unto itself.

is an area where manufacturers and distributors are presented with a bemusing choice different services by an easily specialised and engaged range of outside contractors. And it is an activity which, in many businesses, does often command a high and continuing priority in the allocation of senior managerial time and attention.

many firms, distribution is a process which looks after the moving supplies into the factory and moving finished goods to the customer or which ordered them. It areas with its own peculiar complexity of problems which it is best delegated to as taken on for the purpose. In the pressures for cost savings, distribution will be expected to make its contri-

bution: after all, the money it absorbs is substantial enough. When a new factory or plant is being considered, transport and distribution facilities may be a factor that is taken into account, especially if the supplies required or the products to be made are likely to pose a problem—as, to give an extreme example, at a steel works or power station.

Consideration may even be given to the question of whether it is worth going on running one's own distribution fleet rather than contracting more of the business out, particularly in these days of increasingly onerous penalties for faulty maintenance or operation of lorry fleets. But, generally, there is still a widespread tendency to regard transport and distribution as a compartment unto itself.

Integral

It is, however, much more than that. It is much more than a support service for the marketing effort—a service that aims to operate at maximum reliability for the lowest possible cost. Physical distribution management—to adopt the awkward and off-putting terminology which is increasingly being used—is an integral part of any business. It is a process that needs to be looked at as a whole embracing the entire flow from raw materials to the

final point of distribution including handling, storage, inventory management, data processing, packaging, merchandising, and customer service.

It is a process that needs to be given as much close consideration as marketing and distribution, which needs to be related to them and them to it, and in which the full range of options needs to be considered afresh, for the full value of this adjunct of a business to be realised. None of these activities can be considered in isolation. They are all part of the balanced mix in a company's business strategy.

This approach to the role of physical distribution management may not be universally evident, but is also far from new. There are countless examples of companies which have achieved savings in cost or improvements in customer service—or both—by taking PDM seriously. In many instances, they were prompted by the dramatic changes that have taken place in the marketing and retail distribution of manufactured food and other branded consumer products.

The success of these products depends upon mass advertising and attractive packaging to build new markets and repeat purchases upon high volume

sales and close stock control to ensure low unit costs, and upon a rapid and flexible responsiveness to consumer needs. These developments have in turn been associated with a large-scale re-shaping of the structure of wholesale and retail distribution—the decline of the small, over-the-counter shop and the arrival of the self-service store, the supermarket, the multiple discount house, cash-and-carry, hypermarket, and out-of-town shopping centre.

Examples are always invited—not the time—or it is hard to judge the relative merits of different—there are so many that judge the relative merits of different outside carriers offering different levels or ranges of service.

This is where the distribution group and a specialised transport consultant can come into his Unilever—a world-wide group own. There are not many in which a single day's delay this country. But the Freight throughout the group's operations would require an extra representative body for industry £16m. worth of stock. Most of trial users of freight transport Unilever's transport interests are now running a consultancy service in conjunction with three firms of consultants. The consultant may take anything up to a year to complete his investigation. But at the end of that time the consultant will have acquired a comprehensive grasp of his client's operations and its management and monitoring systems. He will present the options and evaluate them. He will be ready to assist in the establishment of a new system for 35 outside firms as well as 18 Unilever companies, and the number of outside contracts is growing all the time.

Companies of Unilever's size have a relative wealth of managerial talent to be able to focus on such matters. Companies considerably smaller in size are often not so well-placed. The distribution manager is too busy running his parish and his colleagues in the hierarchy too pressed with their own problems. Even if the need for a fresh appraisal is felt, there is

line network for the most natural gas liquids, ethane, butane and propane from the North Sea Brent Field. However, this line is currently running into a lot of local opposition from planning authorities and residents.

In the U.K. there is already an ethylene pipeline crossing the Pennines from ICI's petrochemicals site at Wilton on Teesside, to its plants on Merseyside and also connecting with Shell installations at Carkerton. Now a second pipeline is almost complete between Wilton and BP's petrochemical site at Grangemouth on the Firth of Forth. The 155-mile pipeline is expected to be in the transport of bulk solids such as coal, including the building of a industrial wastes or gravel, and 500,000 tonnes a year ethylene feasibility studies have been conducted for uses such as the removal of colliery spoil. It has been shown that when road or rail facilities are lacking it is cheaper to install pipelines, especially in difficult country.

The obvious growth area for pipelines in the U.K. may be for crude oil and gas developments in the North Sea, but in 1976 pipelines already took a share of more than 18 per cent in the transport of refined petroleum products in the U.K. And with systems for the movement of solids such as iron ore, mixed in a slurry with iron sand and water, already in use in Peru and New Zealand, pipelines are set for an era of major development.

Kevin Done

Major role for forwarders

TRADITIONAL rallying insurance, chartering, and of successive Chancellors of Picking. Exchequer has been to the British industry to viewed by the Jordans survey. Yet it takes a lot more. It selects Mann and Son (London) "as being the outstanding performer" even though its activities were not confined to freight forwarding. Not only did this company achieve a sharp improvement in profits in 1975-76, but its sales improved steadily and its bank borrowings were sharply reduced during the year," comments Jordans.

The industry itself is at a crucial period in its development as it responds to new technological developments and the pressures caused by rising costs and competition.

Replace

For example, the Customs and Excise is planning to replace the LACESS air cargo data processing system with the updated ACP 80, as well as their own in-house computer system.

The industry is well served by the Institute of Freight Forwarders which is helping its 2,700 individual and 620 corporate members to maintain control over the pattern of developments which are pointing the industry in a new direction.

A detailed study of the overall forwarding requirements for the next decade had identified the real training needs of the future. Consequently the Government's Training Services Agency has just set up the international freight forwarding industrial training council under the leadership of the Institute.

The setting up of a training council, however, does not mean that the Institute will cease to have its own education and training committee which provides its present training needs. This will continue but will work closely with the new council.

The Institute is also reviewing its membership pattern and the professional requirements for

membership as part of the overall package of training and other changes which are being introduced.

The Institute is also keen to see much tighter controls exercised over people who operate forwarding services without any proper qualification or backing. But it acknowledges that the final arbiter of standards in the industry is the user.

But if companies using freight forwarding services base their decisions on price rather than service, then standards will suffer. The Institute points out that far too many organisations judge their own shipping department's performance on the actual cost of freight charges to send their goods overseas. But this is only one narrow element of decision-making in the overall distribution process.

The question remains whether the U.K. freight forwarding industry may be subjected to Government intervention in the form of a licensing system, as operates in the U.S. The Government is understood at present to be reluctant to bring in legislation on this issue. But the EEC is also looking at the problem of regularising the activities of freight forwarders between member States.

David Churchill

THE NEW DODGE 300 SERIES RANGE. FOR OPERATORS WITH A HARD NOSE FOR PERFORMANCE AND A SOFT SPOT FOR DRIVERS.

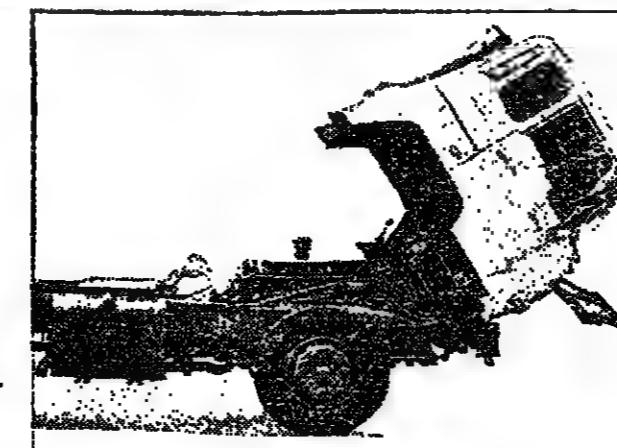


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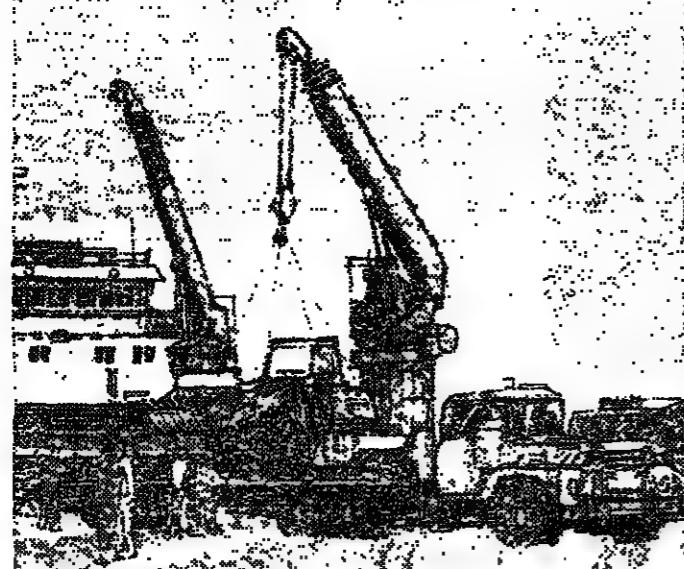


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FREIGHT AND TRANSPORT SYSTEMS IV

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AMID THE general signs of for control over the flow of relief among Ministers and in entrants into a profession which industrialists that the ten per cent remains one of the most inviting pay guideline looks in for the entrepreneur with increasingly as it will stick, limited financial backing and Britain's road hauliers are feel limited skills.

It will be for Professor Foster and his team to assess predominantly that in the Mid-desirability of the various lands, has run into Government restrictive practices under blacklist problems because it debate against the alternative, could find no concerted way of forthrightly argued by the resisting the pressure for a 15 per cent settlement from a 15 transport users' group, the section, which still has not keeping transport costs to a minimum within the bounds of its labour safe and efficient operation.

Forged

In looking at the details of operators' licensing, the committee will also no doubt be bearing in mind the economic pressures under which the hauliers' case has been forged in the last three years. Precise figures are not available on this subject, but last year's Jordan Datascan survey on haulage companies (few of which are publicly quoted) showed an average return on capital employed of around 11 per cent.

Views vary on what constitutes an adequate return. The chief executive of the National Freight Corporation has suggested that allowing for a dividend payment of 10 per cent, the target should be 33 per cent. Mr. James Duncan, chairman of one of Britain's most successful hauliers, the Transport Development Group, did not mention a specific target in a recent review of the subject, but he did join ranks with those who are loudly urging the industry to adopt replacement cost accounting TDG's return on assets, including that in its important non-haulage business, was 15 per cent, in 1976. Another large haulier says it now requires a 20 per cent return compared with 14 per cent three years ago.

If these developments were not enough, road haulage is like the economy in general, still in the trough of recession and punch-drunk with the pace of inflation in its capital equipment. The heavy lorry and its spare parts have increased in price by between 150 and 200 per cent, in six years. It is not surprising that in this climate remedies which appear desperate to outsiders are being sought. The recently appointed Foster committee of inquiry into operators' licensing will hear many demands for a return to something like a pre-1968 licensing regime, when public hauliers were protected from competition from their account fleets; pleas for minimum tariffs in the industry and owners of the almost 40 per

cent of vehicles which are in fleets totalling fewer than six lorries. The Freight Transport Association's monitor of haulage rates suggests that last year hauliers priced a couple of points ahead of inflation and certainly loss-making companies within the NFC have been pricing aggressively. But the industry's leaders say that their own information puts beyond doubt the claim that hauliers' charges are far from keeping pace with inflation.

This raises the question of how hauliers are actually surviving. Although road haulage's record of 400 bankruptcies was one of the worst in 1976, it is hardly a large proportion of the almost 40,000

Probable answer is that corners have been cut on maintenance and, among the small operators, overheads will have been reduced and payrolls cut. Total employment by road haulage has been falling steadily by about 3 per cent a year since 1973 to a figure below 200,000. The truck sales figures between 1973 and 1976 bear witness to the fact that purchases of new vehicles has been put back—a process which can only go so far without disastrous consequences in terms of efficiency and ultimately finance. In the last year, a pick-up in the market suggests this point has been reached for many operators. Given recent rates of inflation, it is probably sound practice to keep the age profile of a fleet to a minimum. P and O Road services, for example, runs an average of three years only.

So far there has been less hard evidence that the industry

has slid into financial ruin than that the three factors together there has been clamour that it is about to do so through what Mr. Duncan describes as "a monumental cash flow problem".

What some in the industry fear



Heavy duty equipment being loaded for transport to Norway.

is that the present unrest on pay—and even those employers who have settled will not rest easy that they can count on holding that settlement for a year if the guidelines are substantially overturned elsewhere.

...will push some hauliers over the edge.

Added to these most pressing difficulties of the economic scene and price/pay code problems, the industry does not feel it is getting much support from the legislators. Mr. John Silbermann, a national vice-president of the Road Haulage Association, said not long ago

now, before Parliament, there is not much for hauliers to worry about, although the increase in powers for the authorities to divert lorries suspected of over-loading to weighbridges will only be the first shot in the Government's campaign to as last year's White Paper put it, "civilise the heavy lorry. Many hauliers do not object to this theme of higher environmental standards for lorries, but they feel that the Government is not offering much in return. What they would like most as compensation is some sign of movement towards higher maximum vehicle weights and, less urgently, a re-think of the budget.

Ian Hargreaves

Highways programme to run piecemeal

IT IS a curious coincidence that the middle decades of this and the two previous centuries should all have witnessed a transport revolution. Two hundred years ago the age of canal building was in full swing. Last century was the age of railway building. This century the major change has been in roads and road transport—or, to be more precise perhaps, in the availability of private transport for the individual business or household. None of these revolutions lasted for very long. There was a great flurry of new construction—on the Continent as well as in Britain—which after a few decades peaked out and gradually waned. Each of these revolutions, in turn generated social pressures and criticism which to one degree or other played a part in setting limits to the extent and rate to which the new mode of transport was developed.

If we look back to see what the Victorians were writing and saying, for example, we can come across much of the same kind of environmental criticism of the railway builders as are now levied at the road planners. We can even find similar arguments being made about the need to preserve and make fuller use of canals as are now said about the railways.

Peaked

To this extent, therefore, we ought not to be surprised by the fact that the volume of road building has peaked out or is likely soon to peak out in most industrialised countries as well as in Britain. Once the main networks have been laid down and the aspiration of having one's own transport has become close to being a reality for most businesses and households, then the pace of new construction is bound to begin easing off.

Nor should one be altogether surprised by the welter of criticism which road building has aroused. The planning and construction of new roads may promise both social and economic benefits in those who will use them—including, one must add, the benefit of cheaper and speedier deliveries to shops and stores. But the process causes very considerable disturbance to the communities through which they are being cut.

To some extent, too, the opposition was stimulated by the particular manner in which road planners set about their task in the 1950s and 1960s. They tended to build roads on the cheap to suit civil and traffic engineering considerations and with insufficient regard for the impact they would have upon the neighbouring environment, including, in several instances, the well-being of those who lived or worked in "riparian" premises. The early wave of enthusiasm for road-building, which infected motorists and the public generally as well as the engineers, led to dizzy uncertainty.

The programme, last year's ideas about carving magnificent new concrete expressways through our congested cities declared, will now be a flexible one. Routes are to be improved to preserve the urban environment, just as the way to safeguard the peace of a hospital ward was by having corridors which staff and visitors way standards and other parts could circulate?

Other factors contributed to—
for example, the trend towards larger lorries (some: a staggered construction of bypasses around the worst trouble spots, leaving the gaps in thing else to which the politicians initially gave their blessing). Bigger vehicles helped road carriers to limit the growth in the size of their fleets, decision announced a couple of years ago, new roads are now being built to reduced design standards in relation to the volumes of traffic that are expected.

Peculiar

It is difficult to resist the conclusion that the pendulum has swung too far too quickly. The case for a particular size of road-building and maintenance programme may not be an easy one to establish. But it always seemed a peculiar form of logic to argue, as Ministers did, that the OPEC oil cartel and the sudden realisation that perhaps one day the supply of fossil fuels—especially oil—might be exhausted; the desperate search for public expenditure cuts at a time when road-building no longer won many votes; the desire to ease by subsidies and other mechanisms the threat that the use of cars for leisure and travel to work was increasingly posing to the economics of bus and rail passenger operation; and the growing doubt about the ways in which the case for particular new road schemes have been evaluated and presented, doubts which the recent Leitch report has in part supported.

All these factors have contributed to one degree or another to the decline in the roads programme. In the past four years expenditure on new construction by local and central government has been reduced by 40 per cent in real terms and expenditure on maintenance has been cut back by 20 per cent. Compared with planned levels of expenditure, the cut-backs have of course been even greater.

At one time in the early 1970s, the construction of some 3,500 miles of strategic routes—motorways and dual carriageways—was envisaged by the early 1980s and a total of 4,200 miles target of the Macmillan Government, will now not be completed before the mid-1980s. By the mid-1970s the initial target had been reduced to 3,100 miles and deferred to the second half of the 1980s, which the later target of U.S. miles had been put off to the 1990s. To-day, with some 2,800 miles of motorway and dual carriageway roads in use, the targets are even more uncertain.

The critics of road building may say it is all very well basing priorities upon industrial, regional and environmental considerations but road users—including road carriers especially—must pay their full proper share of the costs of the infrastructure they use. In principle, there is everything to be said for this last point. One must have regard for the practicalities.

First, it is not easy to calculate precisely what each mode and what each user should bear. Attempts have been made for well over two decades both here and on the Continent to arrive at a workable formula for identifying, measuring, and allocating road track costs. Even if the direct costs—construction, maintenance, policing, accidents and so forth—can be identified and measured, the allocation between and within different categories of users is bound to be arbitrary.

Then there is the question of the indirect or external costs such as noise, pollution and damage to amenity. Should one try to evaluate and charge these, or would the better approach be to tackle these problems directly through progressive improvements in vehicle technology and design? Whether the incentive for improvement be if these aspects were subsumed in vehicle and fuel taxation? Is it not better to set progressively higher standards through legislation? The cost of improvements and the research that led to them would still be borne by the user (and thus by his customers, which means you and me). But in the meantime the problems of noise and pollution would have been reduced.

Furthermore, it is not the road-carriers fault if the ratio between track costs and fuel and vehicle taxation falls. It is the fault of governments for failing to adjust these taxes in line with the rate of inflation. In any case, the ratio can change between a boom and a recession, as well as according to whether road investment is charged on a "pay-as-you-go" basis. Above all, the idea of charging track costs through the taxation system is intended to provide a measure of parity of competitive opportunity to all freight carriers, irrespective of mode, rather than simply to protect railways.

In practice, because rail freight is now expected to meet only its "avoidable costs", it makes hardly any contribution to rail track costs. Indeed, these costs for both freight and passenger operations are now wholly borne by the taxpayer. One may be inclined to accept this is a form of rough justice. But it underlines the difficulties of trying to apply the track cost approach with any degree of sophistication.

Freightliner guilty of exploitation?



"We're the first to admit that using containers enables us to exploit the flexibility of road plus the speed and economy of rail."

It ensures that our customers get the best of both worlds in a unique freighting package that's almost impossible to match. And our advantage is increasing all the time. So, before you lose sleep over the legislation restricting drivers' hours and mileage limits, it could pay you to give us a call. We're always open to a little exploitation!"

Freightliner – today's answer to tomorrow's regulations.

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Freightliner
—the best of road and rail put together

Freightliner

FREIGHT AND TRANSPORT SYSTEMS V

Developments in road transport

COMBINATION of more queue of countries seeking bi-trade with Europe and lateral agreements," it said.

for road transport to the Middle East continues to be the negotiation of agreements in varying stages with the conditions resulting in Soviet Union and a large number of countries to the east through European countries ranging from Turkey to Afghanistan.

The department is also watching developments in north-west Africa on the grounds that easier conditions in this could become a key route producing countries to West Africa, although nothing has yet happened there to any

ries with heavy traffic great extent.

As in European countries, the old problem is that most of those limited number of permits is send virtually no available. The first of these discussions to the U.K. so the question is whether to give relatively few operators a relatively large number of permits or those already in the market and at the same time admitting new companies.

Half of quota increases is now such an extent that in the summer of 1976 its use had to be restricted because of pressure on the Hungarian quota.

Although the restrictions were subsequently eased later in the year, it became clear that Austrian and Hungarian permits would have to be added to those for which annual allocation systems had to be devised last year.

The most recent negotiations have taken place with Iraq, Syria and Jordan, and meetings with representatives of each country have taken place. An agreement has been reached with Turkey, operating from the start of this year, which provides a quota large enough for British needs.

The department has also received a surprise approach from Afghanistan to negotiate an agreement, largely because of that country's new policy of transporting exports such as skins and similar goods overland through Europe. Cyprus has made a similar approach for negotiations.

Within Europe itself the most significant change for some time has been the 20 per cent increase in the EEC quota, the first since the 1973 ruling which pegged the number of permits at 272. A meeting with Italian representatives has also taken place, again for the first time in three years, which resulted in an increase of 30 per cent in the quota and a generally more relaxed attitude on their part.

The major concern in Europe at present is the attitude of Austria, which is seeking to impose a large increase in tax from July 1—assuming that this measure is passed by the Austrian Parliament. The EEC is in the meantime bringing considerable pressure to bear on the Austrians and has made hints that EEC aid for infrastructure developments may be available if a softer line is taken.

Lorne Barling

In 1976, however, after a substantial easing of the French quota, an experiment was attempted under which any operator who chose to apply for a number of factors appeared to lie in not having an chosen is even more difficult. In general, the policy pursued by the department is to assist hauliers could obtain licences those companies which have demonstrated some degree of self-help, particularly by use of co-operation quotas or the road-roll systems.

One of the most important recent developments has been the increased traffic through East Germany (the German Democratic Republic). This growth was encouraged by the move from Ludwigsburg in Munich of the W. German Federal Railway's piggy-back terminal, with a substantial increase in the price charged.

Of the countries on the route only Hungary imposed quota, of which in previous years only about one per cent. had been used by British operators. However, use of that route grew to

icator

Ideally, it is suggested, department in its import vehicles should be fully loaded in each direction with goods of using to anticipate areas the highest value and the difficulties may arise, original allocation system sought. It said in a recent to put these principles into practice. But as traffic volumes shown that a sudden growth in the system was found to of road traffic can lead to too cumbersome. It was therefore progressively capacity restrictions, replaced with the block allocation system, based on the extremely short notice. This happens those number of permits received in without bilateral previous years. But this, too, are at a double presented a major problem by they have no legal creating a closed shop of existing operators—one which protection against the turn was partially resolved by measures and find them the end of a long use of increases in quota.

Trucks of the future

FIGURES for the first 1978 are anything to go the heavy goods vehicle come through the of the end of 1977 and the growth trend it flushed for most of the of that. This is vice rises, increased costs and the prospect antal increases in ay.

sector has tried to its car-producing y, venturing the hope increases in vehicles kept to two a year, again as with cars, up four times as he industry struggled with high inflation in basically a depressed

the all-important facing the industry are the extent of the recovery, the extent to at will benefit truck and which truck will benefit in the past, although the small-lorry-buyer has largely faithful to the product, the market at end has become a ad in which the European manufacturers have reaped a harvest, at least in market penetration if in profits.

The U.K. builders are sick, with Leyland producing new version of the for the recent truck. Amsterdam and aving already updated

The smaller prote Foden, ERF, and Atkinson have all their vehicles in order with the European in Britain and to their own chances of the Continent.

all this activity has revolution in the of comfort provided drivers. Previously the were able to adopt a valuer attitude which ed the mollycoddling drivers, who were ex-shake their bodies their eardrums to freezing in the being nearly roasted the summer.

is a result of union

it mainly as a result manufacturers setting

higher standards, cab

have been improved

JK industry has now

light up. This is likely Cummins for instance recently

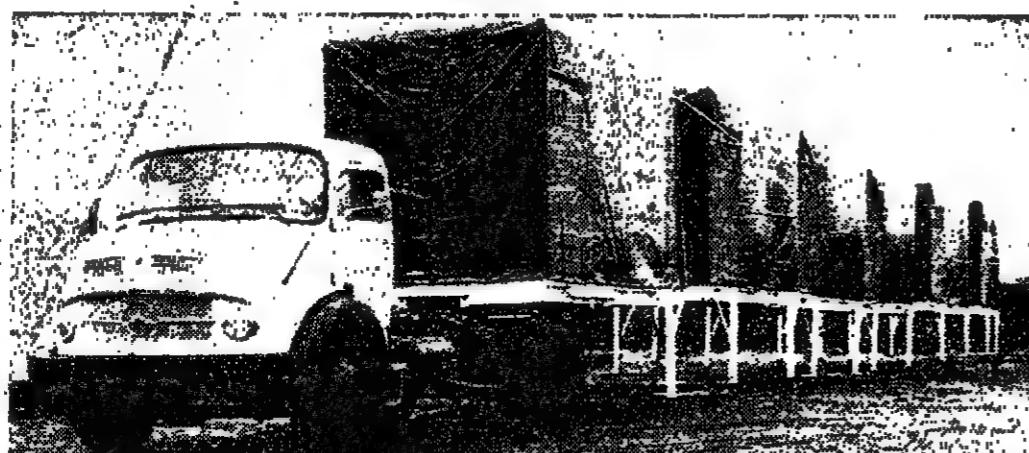
introduced a big-cam version of

all cab interiors, their 200 hp engine which the

short-haul smaller company claims will improve

likely to improve over miles per gallon by 10 per cent

This has yet to be proved, how-



Demountable refrigerated box van bodies by Crane Fruehauf Rigids. This particular consignment, destined for Iran, has refrigerated devices in the side walls which are completely self-regulating.

where commercial vehicle manufacturer, and is also dependent on diesel power-packs for refrigerators will be working to a good marriage with the right type such as Petter—while at the other end of the scale the same standards of driver gearbox, axles and tyres.

At the same time, however, work is being done but perhaps operators are still cost-conscious and there will come a time when forward will be European agreement on standard specifications

all manufacturers will have reached an acceptable standard of cab comfort, at which point other considerations will come to the fore.

Already in Europe one of the main selling points is on cost per kilometre. This takes in not only the fuel consumption and servicing charge, but average downtime due to breakdown and time lost in waiting for parts. Manufacturers are keen not only to emphasise reliability but also to build up their spares and service back-up.

This is happening in Britain too, with most of the major manufacturers offering a 24-hour emergency breakdown service and a priority parts delivery service in order to persuade buyers to use their lorries.

Manufacturers in particular would like to see some standardisation—recently Crane Fruehauf formed Fruehauf Europe to look at overall European opportunities—but progress is likely to be slow except in certain areas like curtain or aluminium-sided tilts which are used on a pan-European basis.

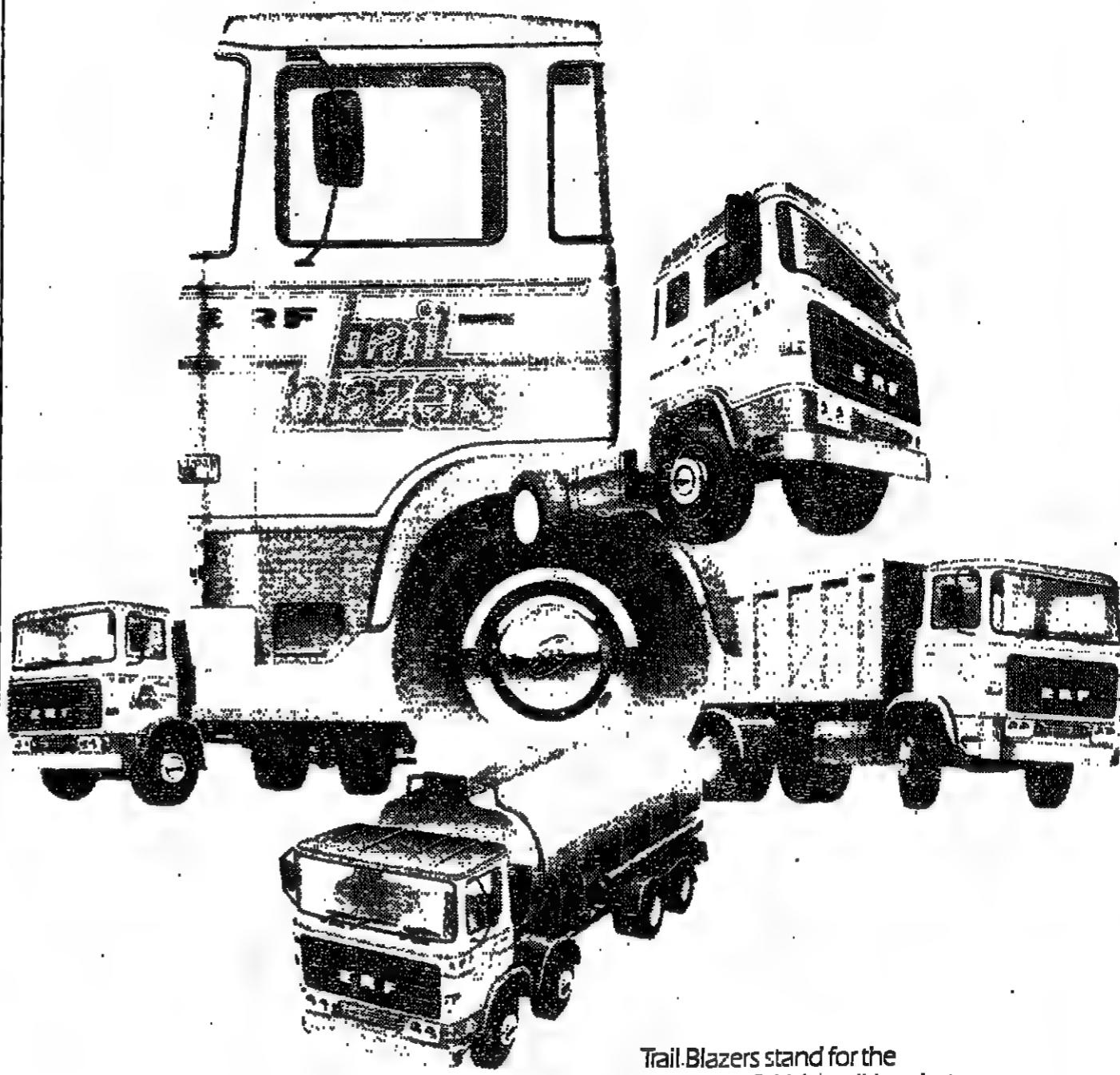
There is also some growth in the market for demountable bodies but as an alternative to a fifth-wheel articulated trailer it will be some time before they

are a serious challenge.

On the technical side emission and noise controls coupled with smoother and more economical performance are the main goals and the industry is striving hard to make advances in these directions. If for no other reason success with one or another should produce commercial success as a result.

Stuart Alexander

Blazing the trail for Britain to keep industry on the move.



Trailblazers stand for the independent British tradition that culminates in ERF... a tradition carried forward by design and engineering leadership.

With a long track-record of major innovation, the ERF tradition has been built on advanced engineering achievement. For the operator and driver, this means a whole range of major advantages such as:

■ The ERF SP cab, built of corrosion-proof moulded S.M.C. glass fibre on an immensely strong steel safety frame specially treated with rust inhibitors. So it retains its new condition year after year of service.

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■ Twin ram, hydraulically operated cab tilt mechanism, designed with safety first.

■ One of the finest integral power steering units in the world.

■ Comprehensive standard equipment including quartz halogen headlights and an air driving unit to process all air used by the braking system.

Not surprisingly ERF has acquired a reputation which its policy of constant improvement, research and refusal to compromise is geared to maintain.

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That's why you'll find a service network right across the country organised to keep your trucks running smoothly.

And to earn their keep dependably—year after year!

Assess the ERF Trailblazer range in this light for yourself—we have every confidence that your own business will find good reason to join in "Blazing the Trail" for Britain!

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FREIGHT AND TRANSPORT SYSTEMS VI

Shipowners at odds over policy



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With a name like ours there isn't much doubt about some of the things we do.

Moving freight efficiently by sea has been our business for a hundred years. Today we have a million tons of shipping on sea routes around the world.

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Blue Funnel - worldwide oil, bulk and Middle-Far East freight services.
Elder Dempster - West African cargo liner services
Ocean Fleets - ship management services
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Ocean Transport & Trading Limited India Buildings Liverpool L20PB Tel: 051-236 9292 Telex: 629236

On land

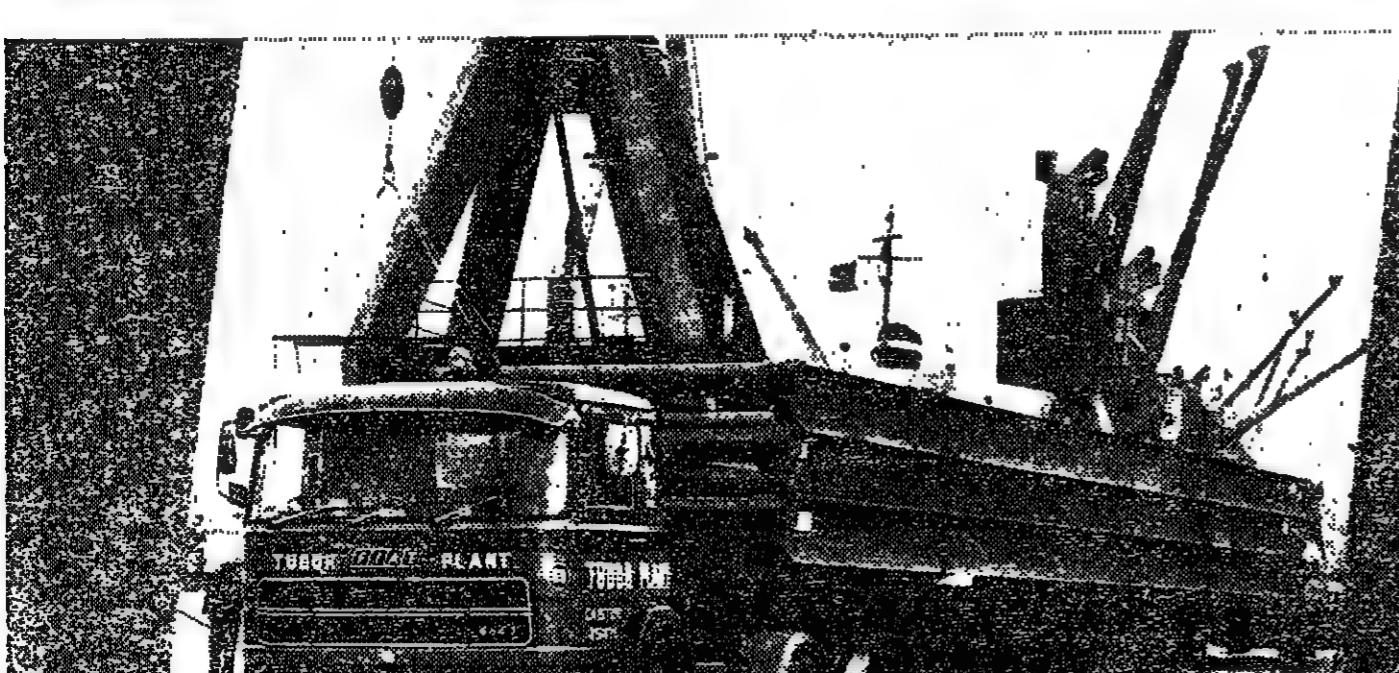
Wm Cory - fuel distribution and lightering.
Cory Distribution - High Street distribution.
Transflash McGregor - European road transport.
McGregor Cory Cargo Services - warehousing and freight forwarding.
Repcon - container/trailer repair services.
Straits Steamship - engineering and property.

These are some of the Ocean Group companies.

In the air

McGregor Swire Air Services

The wide world of ocean



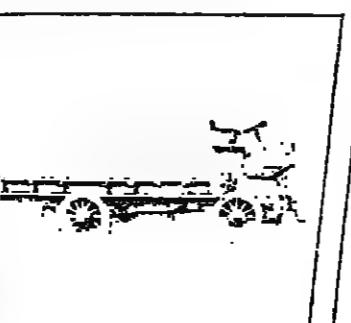
TIME AND TIDE WAIT FOR NO TRUCK

While the relentless search for oil continues day and night in the North Sea, there is a constant lorrying of rigging and equipment to the fields operated to strict time schedules.

Fiat plays a vital role in this service and the Fiat 684 (above) is just one of a fleet of tough, reliable Fiat used by Tudor

Plant to transport equipment for North Sea Oil operations to various supply vessels. The Fiat 24HP (below) of 1904 was the first of a family of Fiat Commercial Vehicles which today are manufactured, assembled and sold all over the world in countries as far apart as Argentina and Egypt, Norway and Zaire.

And Fiat are famous across five continents for technical innovation and for research into special transport problems. Today, as part of the Ivecvo group of companies, Fiat Commercial Vehicles offer the resources of over 3,000 sales and service dealerships throughout the world.



Better trucks make better business.

FIAT

Fiat Commercial Vehicles Limited



"AS I watch these two different areas of my responsibility, shipping and civil aviation, I ask myself whether perhaps shipping is not moving in the direction of civil aviation, freedom by regulation instead of freedom by right," So said Mr. Edmund Dell, the Trade Secretary, in an address to the General Council of British Shipping at the end of last year. The tone of his speech was one of hints rather than proposals, but it struck in the direction of a theme which, apart from the general condition of the economy represents the greatest source of anxiety to shipowners.

The question raises itself from a variety of angles. On the one hand we have the long-drawn-out saga of confrontation between U.S. anti-trust philosophy and the self-regulation of liner conferences systems; on the other the free-hauling competitiveness of the Russian merchant marine, which has undercut its way to a significant presence in a number of the world's most lucrative cross-trades.

Surrounded by such diverse protagonists, European shipowners are having the utmost difficulty in maintaining their systematic defence of their practices and indeed of finding anything like basic agreement among themselves. There appears to be general support for the proposition, for example, that the best way to deal with the Eastern bloc threat is by concerted action through the EEC, but there is little common ground about the fundamental question of access to trades, as we have seen in the sometimes bitter differences of significant gap within the EEC view between member States over the UNCTAD liner code.

One of the problems is that shipowners have not traditionally welcomed the attentions of Government other than in strictly defined areas such as safety, crew standards and the like. Now the industry is faced with a number of international political issues which it does not possess the power to resolve itself. In no other industry is the world-wide debate about protectionism so pertinently focused.

The timetable for processing all these issues remains uncertain, but if last year was principally one for bilateral efforts to alter Soviet policy—Ministers from West Germany and Britain visited Moscow on the issue—1978 will be the year of forging a common programme. Mr. Richard Burke, the EEC Transport Commissioner, has said the objective is more to repair trade defences within the Community in order to which is anathema to a country negotiating from a position of strength than to seek a confrontation, but there is a body upon cross-trading. Having put of opinion among shipowners up several proposals in the past which believes tougher direct two years, all of them entirely focused.

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Policy decisions for British Rail

FOR BRITISH Rail's freight encouraging developments for operations this year and from take sufficient advantage of an business, the big event of last rail freight in recent months then on produce sufficient margin from the EEC, which finally gives to be able to ride the cycle during the past three years as ownership was unquestionably the from the railways pushed Britain into accepting of industrial production even a result of Government pay decision to return to railways the shorter eight-hour driving when it turns into the kind of policy. Labour expenses amount ownership the Freightliners container transport company founded by British Rail but a three-year phase-in starting 1974. It is a tall order for a total costs and 40 per cent. of recession Britain has had since 1973. It is a tall order for a total costs and 40 per cent. of its direct costs (that is, costs controlled since 1968 by the National Freight Corporation.

This was the climax to a year which was kind to rail freight in terms of Government policy but during which the deepening recession in the steel industry once again threw British Rail's planning into error and instead of the budgeted increase in traffic, total freight carrying fell from 176m. tonnes in 1976 to 171m. tonnes. Final financial results for the year have yet to be released, but there is every indication that they will show a deficit of around half last year's £35m.—a commendable improvement given the market circumstances.

Another policy change in the past year which will work in rail freight's favour is the proposed widening of the scope of grants towards the cost of private rail sidings under the terms of Section 8 of the 1974 Railways Act.

The immediate effect of provisions in the Transport Bill now before Parliament to bring into the scope of Section 8 payments towards rolling stock for use in such sidings has, inevitably, been to slow down the flow of applications until the more generous terms are available—probably by this autumn. But it has also been encouraging for British Rail to see that even within the more restrictive interpretation of section 8, a number of substantial grants have been made on broad grounds of improving rail facilities in the interests of keeping heavy loads off the road, rather than for new sidings.

The best example here was probably a £137,500 grant to Freightliners to meet part of the cost of relaying worn-out crane tracks at its Stratford terminal, although under rail-ways ownership Freightliners has to give specific approvals for any capital investment over £2m. The second was a re-iteration of the Government's commitment to stop subsidising changes like these, the uncertainty persists as to whether there is no overall maximum limit.

Freight in the form of grants to have involved payments of either British Rail or National rail freight has moved fast enough to combat the savage roads.

This means that British Rail competition of the lorry and Even within the Freightliner

continued running battle over from the past is a substantial restraint in costs of footplate handicap in British Rail's manning. The drivers' union, attempt to produce a comprehensive campaign on this issue from ASLEF, has now switched its hensive rail strategy. It combined with problems of the present, such as the difficulty of arriving at a sensible rationalisation plan for its heavily loss-making door-to-door parcels service because of lack of Government interest in the problem of over-provision of facilities elsewhere in the state-owned parcels sector. There would also be resistance by unions to the loss of jobs which would be involved in such a rationalisation.

In policy terms too there are doubts about the future of Freightliners. British Rail has publicly guaranteed that it will continue to be run as a separate company—guarantees which were necessary to quell the alarm expressed by a number of Freightliners' major customers that it would lose operational flexibility, for example, in balancing its use of road and rail movements, under British Rail control.

Freightliners is also keen to retain marketing independence—an independence which can only be meaningful if the company is allowed to compete for business with other divisions of rail freight. British Rail has still not expressed a firm view on

the marketing question, but part of its justification for demerging the return of the organisation was the railways' need to replace worn-out containers, a comprehensive marketing strategy with Freightliners as its primary carrier of door-to-door consignments.

It is also useful to remember that over half of Freightliner's business is related to managing container movements—a situation which presents British Rail with the challenge of improving its long-neglected approach to export traffic. The appointment of a European traffic manager at the end of last year is seen in the right direction, but one believes that the existing rail-ferry ships, with a maximum capacity of 22 wagons, are not equipped to compete in the market.

The Channel Tunnel remains BR's best hope, albeit a remote one, at present, of a major boost for its European business. It is at least encouraging that BR's planners have accepted that it would be better to get the tunnel on the basis of existing rail links on this side of the Channel, rather than demanding a brand new big speed link.

Ian Hargreave

Total staffing levels within British Rail have fallen steadily since 1974, but the target of 8,000 fewer jobs in 1977 has been missed by almost half as the National Union of Railmen has withdrawn co-operation on de-manning. Because it says its members are being called upon to do too much overtime and rest-day working. It may be that a renewed push can be given to the de-manning programme in the context of the present round of bargaining on productivity bonuses, but British Rail still seems to be some way from agreeing with its unions on an industry-wide formula for the measure and reward of productivity improvements.

Less significant in terms of the number of men involved but of considerable psychological importance for the railways manpower strategy is the

This backlog of problems

is possible also that the return of Freightliners will, at first cause rather than solve problems. The biggest worry is that the company, which was in a ragged condition when National Freight took it over, has not been given the investment in terminal facilities needed to meet the almost trebling in volume of business in the past decade because of the cash-flow problems which have bedevilled NFC since its formation.

The outcome is that the company, now once more in the limbo of an ownership change,

Whole train consignments

IN THE past ten years, the biggest single change in the railway freight business has been good. The number of wagons in the fleet is now 165,000, not much more than a third the number in 1967, and there has been an almost equal drop in the number of locomotives and terminals.

The logic of this strategy is inescapable, deriving as it does from BR's analysis of the continuous flows of heavy materials which form the bulk of its tonnage from the coal and steel industries. A 27-wagon train set linking the British Steel works at Port Talbot and Llanwern, for example, is capable of a payload of 2,025 tonnes—a equivalent to 63 of the heaviest lorries permitted on British

This is secure business which carries only one major disadvantage: that almost all its overheads are fixed and not easily reduced during times of economic recession when revenue from wagon load movements in favour of moving consignments in whole trains.

Because this is an area of such intense competition, keen pricing, speed and reliability are critical. Neither of these qualities is offered by the traditional brakeless or vacuum-braked wagon, which is limited to speeds below 40 mph for the most part.

BR now has two weapons in its armoury for this business: its 16,300 air-braked wagons and the Freightliners system now in operation between the two. There is certainly a degree of overlap in types of consignment—whisky for export, for instance, goes by both systems—and although such competition is inherently bad, it raises the pressing question of priorities within a strict capital spending allowance.

Speedlink's 68m. capital programme over six to seven years is £51m. more than Freightliners has received during nine years with National

Freight.

The air-brake network will comprise 50 daily (or in most cases nightly) services by the end of this year with running speeds over 70 mph. At the end of last year, the service received after a good deal of agonising, a new name: Speedlink—a title not long before associated with an experimental idea for re-invigorating small-consignment traffic by a new unloading method at terminals.

This earlier Speedlink was given short shrift by the Railways Board on the grounds of cost, with preference going to wagonload business that believes in rail freight load for effective competition with the wagon network which has been able over the last couple of years to prove each of its routes in turn and where a particular service has not been cost effective to quickly withdraw it.

Such attitudes represent a complete transformation from the old concept of the railway as the uncitable, almost unchangeable national network of services—theme which still hampers progress in future planning for rail express parcels.

At the end of 1977, Speedlink had picked up 2.3m. tons of business, of which BR estimates

200,000 would otherwise have gone to road hauliers. It hopes its tonnage will be 4m. by the end of this year and 8m. by 1982 at which point its contribution begins to look significant in more than merely psychological terms. By this time, Speedlink should have a fleet of almost 5,000 wagons.

One obvious consideration now that British Rail is to repossess Freightliners is the avoidance of wasteful competition between the two. There is certainly a degree of overlap in types of consignment—whisky for export, for instance, goes by both systems—and although such competition is inherently bad, it raises the pressing question of priorities within a strict capital spending allowance.

In addition to the Freightliner and siding to siding wagon-load traffic, British Rail also has a residue of wagons used business for which offers, in conjunction with National Carriers, collection and delivery by road.

In 1977, this involved 1.8 tonnes of goods, mainly steel products. It accounted for 98 per cent. of the traffic passed through road-connected depots.

Although customers already pay a comparatively high rate for this service, income is still inadequate to meet all the associated costs, even with wagons whose value is fully written down. So the policy is to gradually price up these services and to seek new business only where it makes commercial sense—which probably means for hauls of at least 2 miles.

The bulk of the door-to-door services are, of course, parcels and in this department British Rail's intentions are still far from clear. Last June's Transport White Paper specifically rejected a coordinated switch to losses among the four owned parcel carriers taking the line that it was up to companies involved to take pricing action and reduce costs in order to get the business into surplus.

National Carriers has been given some special help with investment in the Transpo Bill, having broken even trading terms for the first time in its history in 1977 and so far another NFC company returned to trading profit after losses in 1976. The other mail carrier, the Post Office, is projecting a surplus in its service business. Red Star, the joint express service by which parcels can be booked on specific passenger trains, continues however, to expand, indicating how very soundly based the sector is.

So thus far the Government strategy seems to be on course although the continuing overlosses of rail parcels remain one of the many threats to the ability of British Rail to survive.

Ten years ago the South African Government ordered a losses in its freight business.

CONTINUED ON
NEXT PAGE

Containers meet problems

CONTAINERISATION is now established world-wide, and has passed through its honeymoon period. The problems have begun to multiply.

Historically, the concept has been around since the 1930s, when U.K. Royal Commission on Transport commented that it was a matter of some surprise to its members that the advantages of containers had not become obvious to shippers. They were perhaps obvious, but the hardware was lacking.

The Americans were the first to take the risk. In 1956 an American trucking company began taking cargo by sea in containers between New York and Puerto Rico. After a nine-year gestation period, containerisation came to the transatlantic trade when Malcolm McLean's ships carried containers between New York and Europe. The container revolution had begun.

The effects have been spectacular, as Londoners well know. The complex of Thames docks which began at Tower Bridge and stretched for miles down the River St. Catherine's, London Docks, the Royal Group, the East and West Indian docks—have either closed or are running at a fraction of capacity.

Container vessels need the work—and there are increasing signs that they are not getting

it. The City of Durban is a good case in point. Launched last September from the Bremen yard of A.G. Weser, the 48,000-ton ship is one of the largest container vessels ever built and one of the most sophisticated. It is designed to carry 20-foot containers, many of them refrigerated, stored ten across below decks. A computer monitors the refrigeration and maintains correct temperatures.

But now the problems are not merely caused by that good idea—they are part of the trade itself. Naturally enough, these problems are inseparable from the general world-wide recession, a recession which has been particularly hard on the shipping industry and continues to be. Equally naturally, the container world has displayed some twists of its own to worry the major shipping lines, whose investment in containers is now immobile.

Massive

Containerisation offers enormous economies of scale and of time. It also calls for massive investment, both in the containers themselves and in the infrastructure of the ports. Finally, container ships themselves are multi-million pound investments—the recently launched Ellerman Harrison Container Line's City of Durban came in at around £80m.

So container vessels need the work—and there are increasing signs that they are not getting

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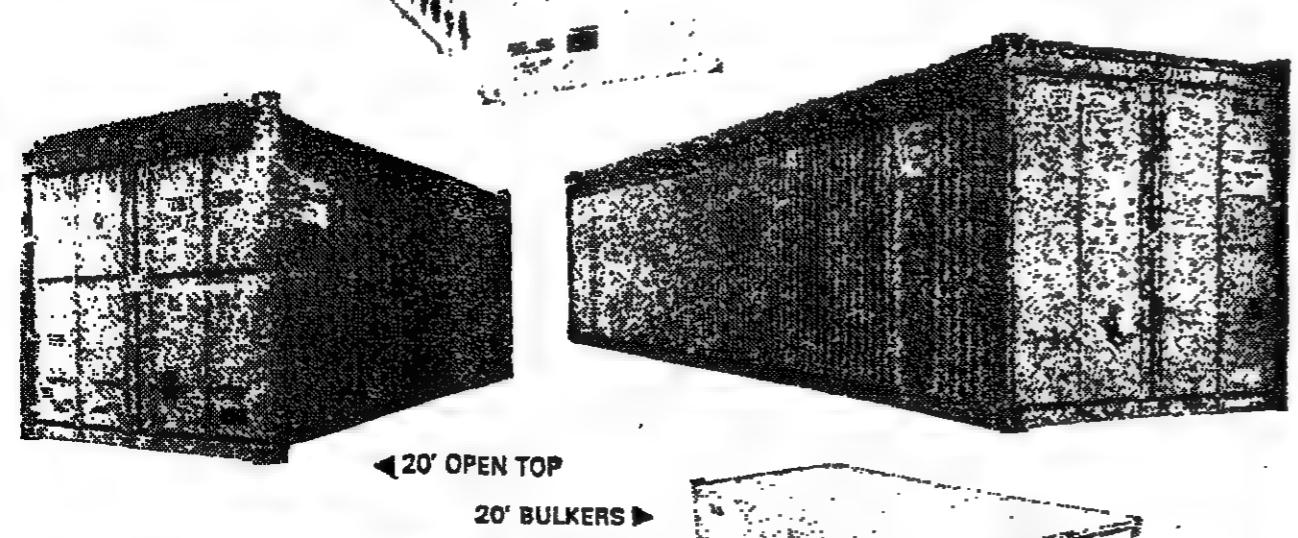
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FREIGHT AND TRANSPORT SYSTEMS IX

Rapid growth in air cargo

ABOUT the world, the freight still only use it on an ad-hoc basis when traditional means of surface transport are blocked by strikes—such as the U.S. ports strike of recent weeks. Far fewer shippers in the world's scheduled air transport as in 1977 rose by 7.6 per cent. In the same time all available indices for freight covering Britain, European and U.S. and international and including the activity confirm that activity has increased. One estimate sets in the U.K. alone at 10 per cent a year.

Another factor is the need to develop a much greater number of regularly scheduled all-freight services than is the case to-day over a much wider spectrum of international destinations. On some routes, such as the North Atlantic, some of the present all-cargo Jumbo Jet services do well, but there are probably many more routes that are less competitive, but more lucrative, waiting to be exploited by the airlines.

On the ground there is undoubtedly a need for many more automated cargo terminals at major airports, like those at Heathrow, Schiphol, and Frankfurt. There are still far too many airports where cargo is still relegated to old, draughty and remote sheds, with inadequate customs facilities, and often almost no facilities for even temporary storage of any kind.

It is significant that this lack of adequate facilities is frequently to be found in the countries of the Third World, which make ideal carriers. In addition, cargo handling techniques of some of the world's ports have helped to encourage growth. One in particular is the realisation on the part of many airline managers that there is a period of slow, steady growth, which may be largely neglected by the business can be better returns than one airline carried through the economic situation of the world by this timely to cargo.

ove

factor has been the entry into service of a number of new wide-craft, such as the 7E, which make ideal carriers. In addition, cargo handling techniques of some of the world's ports have helped to encourage growth. One in particular is the realisation on the part of many airline managers that there is a period of slow, steady growth, which may be largely neglected by the business can be better returns than one airline carried through the economic situation of the world by this timely to cargo.

A more liberal and understanding attitude on the part of many governments would also do much to help. It is still possible to find some countries where the customs formalities are handled almost as though the incoming cargo aircraft and its crew were trying to perpetrate a crime rather than stimulate valuable business activity. Even where more enlightened attitudes exist, the documentation that is required is tedious and time-consuming, and frequently uncompromised, requiring considerable physical effort in preparation.

These are some of the extreme elements in the world air transport system that are mitigating against the development of air cargo, but they are sufficient to slow the prospective growth rate unnecessarily. A concerted attack by the air transport industry on these problems, with the assistance of those more enlightened governments of the West who can see the value of such a development,

might work wonders. As it is, however, it seems that cargo will continue to develop piecemeal, gaining strength and importance gradually, rather than achieving the swift and revolutionary breakthrough that many believe to be possible.

One breakthrough in the cargo rating structure which may go a long way towards boosting cargo development is the re-introduction by British Airways earlier this year of its low-priced contract structure—a modified version of the scheme which ran for the first six months of 1977. Earlier opposition to the scheme by U.S. airlines and the U.S. Government forced British Airways to suspend the new pricing policy last June, after it had boosted business by 30 per cent. But by modifying the scheme, and submitting it to BA, and the airline expects further deals to be signed soon.

The airline is hopeful that once the success of the contract rates scheme has proved its value on the North Atlantic, it will spread to many other parts of the world.

In addition to the scheduled airlines, which carry an immense amount of cargo in containers in the holds of regularly contracted passenger airliners as well as in their own all-cargo aircraft, a large volume of short duration only, and that the basic strengths of South Africa in natural resources, so many of which are badly needed by the developing world, are bound to move in increasing quantities during the lifetime of the City of Durban.

Mr. Martin-Jenkins' speech was an optimistic gloss upon the situation. The "political reasons" which have caused a fall in the trade have, if anything, become more urgent, and look like continuing to do so.

A second major worry for the established container lines is the rapidly increasing strength of the Soviet Union in container transport. A £27m plant supplied by the Japanese firm of Kawasaki is now nearly complete. The plant will have an annual capacity of around 40,000 units, and will make the Soviet Union self-sufficient once it comes on stream later this year. Last year the USSR's first container plant at Odessa was opened, with a capacity of 5,000 units a year.

Commenting on the state of trade in his speech at the City of Durban's launch, Ellerman-Harrison's chairman, Mr. D. F. Martin-Jenkins said: "There is no doubt . . . that since we

have for containerised freight from London, Glasgow and Manchester to New York, with a 5% discount for off-peak shipments between 1800 hours on Sundays and 1400 hours on Tuesdays. Cheap contract rates are available on BA only from Britain to the U.S., and not vice-versa.

Contracts

The airline said it had devised the idea originally to stimulate trade between the two countries, and to turn over used transatlantic cargo capacity to good use. The majority of the U.K.-based freight forwarders, including some of the biggest in the business, have already signed contracts with BA, and the airline expects further deals to be signed soon.

The airline is hopeful that once the success of the contract rates scheme has proved its value on the North Atlantic, it will spread to many other parts of the world.

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This rapid plunge into the market by the Soviet Union has, ironically, threatened the growing predominance in the supply of containers by Japan itself. The Japanese container manufacturers see the Abakan plant as a threat not just to their own exports to the Soviet Union, but also to their other large export markets in Singapore, Hong Kong and Nigeria.

However, U.K. ports still lag in the world containerisation league. The latest figures (for 1976), published by Containerisation International, shows the top four ports with over 1m. TEU annually to be New York (1,720,000), Kobe (1,245,491), Rotterdam (1,224,725) and Hong Kong (1,029,059).

London comes in 19th place with 317,148, while Southampton stands at 254,077. Felixstowe at 235,084 and Harwich at 151,744. In Europe, the largest TEU growth last year was achieved by Le Havre, Hamburg and Lethbridge.

A final note of perspective; it should be remembered that containerisation still has a long way to go. Around 90 per cent of tonnage is still carried by the conventional cargo ships.

grown to eight swing-tail cargo operators, of whom the CL-44s, and in 1977 the Transmeridian group moved into jets, with the introduction of two DC-8 freighters.

Of these, the largest is IAS Cargo Airlines, founded by Mr. Alan Stocks in 1966, which now carries over 50,000 tonnes of cargo a year. From a turnover of £215,000 in 1970-71, and only one Britannia aircraft, IAS has expanded rapidly and for 1978 anticipates a turnover of £1m for the over £2m, and a pre-tax profit of £1m. Its current fleet includes 4 DC-8 freighter jets, three Boeing 707s, two Britannias, one CL-44, and a Hercules freighter.

Tradewinds, founded in 1968,

has also developed rapidly in recent years, and now has a fleet of two Boeing 707s, four turbo-prop CL-44s and a Bell Jet Ranger helicopter. Although still handling some single-entity work on specific contracts, the emphasis at Tradewinds is on split charter work to the Middle East, and to West and Central African markets. Earlier this year, the Lonrho group was planning to acquire Tradewinds. New routes include a proposed U.K.-Latin American service and an extension into Far Eastern markets.

Transmeridian was founded by Mr. T. D. (Mike) Keegan over 16 years ago, and also specialised in long-haul cargo work to the Middle East. Far East and

regulations will work out in practice remains to be seen, but they appear to be a step towards that even greater liberalisation which the air freight market needs world-wide.

If it is really to achieve the breakthrough nearly everyone engaged in this section of the air transport industry believes to be ultimately achievable.

Michael Donne

Aerospace Correspondent

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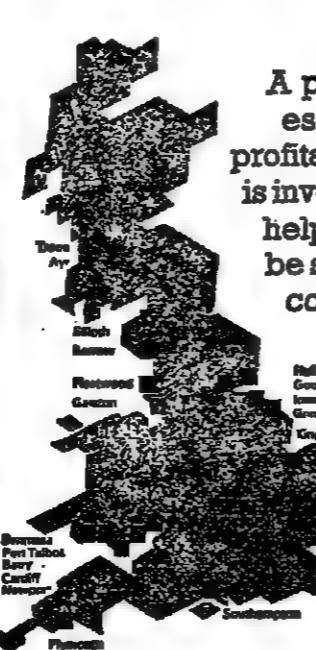
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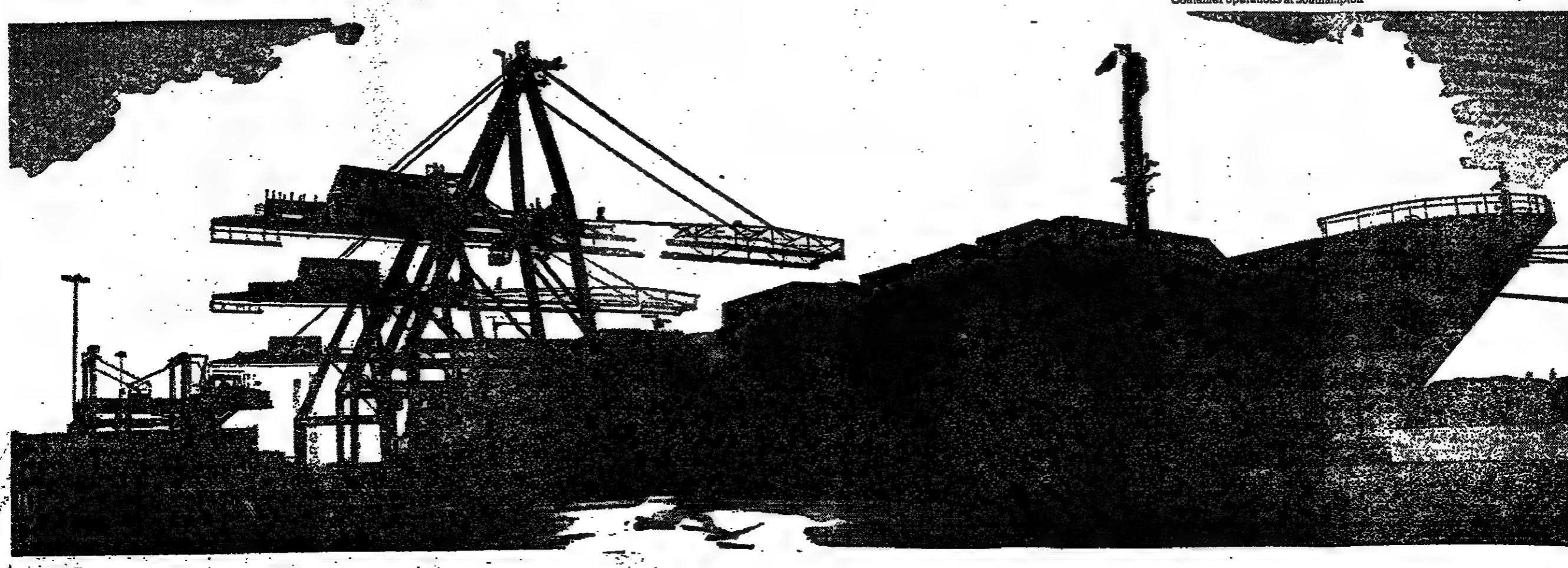
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one quarter of Britain's seaborne traffic. At the same time the Board is generating the cash flow necessary to finance its investment programme from its own operations, without recourse to borrowing. Over the last few years the Board has steadily increased its profitability, achieving a return on capital of 15.6 per cent in 1976.

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FREIGHT AND TRANSPORT SYSTEMS X

Major airline plans

THE PATTERN of changes in facility, with a minimum of man-
procedure. Her Majesty's average of 11.6 per cent., a ground equipment. Plans al-
technology to cope with the handling. The system has been Customs and Excise is planning higher rate of growth than for
airlines' growing air freight designed and produced by a central computer for all cargo ready announced call for the
activities is revealed dramatically in current plans from Masters Air Cargo. spending of £90,000 over the
British airlines.

The plans may not have an immediate impact on the industries serving the world airlines, as much of the technology required for growth already exists. Instead, the expansion of its long-haul and short-haul operations may be accomplished using new and as yet un-named aircraft. The future of the airline's cargo operations and the rate at which it can be expanded, depends to a large extent on the outcome of these modifications in older aircraft. More computer equipment, however, is on the way.

Centrepiece of British Caledonian's firm, cargo equipment programme, announced last autumn, is a £250,000 semi-automatic mechanical handling system which will be fully operational by this autumn. The system will handle freight through specialised storage and transport equipment. The equipment will be used to equip the new cargo centre under construction by the British Airports Authority at Gatwick, and to handle 150,000 tonnes of cargo each year. The system designed to simplify cargo handling paper work, and in 500,000 tonnes and next year is expected to have a capacity of 200,000 tonnes.

The British Caledonian London's Heathrow airport, the system will provide a means of moving to a more comprehensive moving all cargo, including computer-based cargo handling system will be linked with the growth in world air cargo and out of E.Cal's new freight charges in Customs clearance

into and out of Heathrow. This is the HMC80 computer project, also destined to go into full operation in the 1980s.

This computer, the British Airways BA80 system, and other airlines' equivalents will interface with the ACP80

'switch' junction.

The completed systems have been necessitated by the forthcoming withdrawal of the National Data Processing Centre's LACE computer at Harmondsworth used for processing customs clearance for imports arriving by air. This is now used by all airlines operating into Heathrow Airport —London.

In terms of tonnage, Europe was dominated by West Africa —now uses its BACCHUS computer at the Heathrow cargo centre. The computer's function of matching consignments to available space on board aircraft will also be transferred to the BA80 central computer.

There is no doubt that these computers will be designed from the outset to handle a vastly greater volume of international air cargo expected in the 1980s.

An idea of the expected increases may be given from figures published by the International Air Transport Authority. Over the period 1976-1981,

To cope with this current and anticipated demand, British Airways is investing steadily in

the most rapid growth is likely to be in the trade between Europe and the South Pacific regions, while there will probably be a continued healthy performance in trade between Europe and central and southern Africa.

With no immediate plans to invest in cargo-only aircraft, most of the other capital spending will be devoted to ancillary freight handling equipment or on modifying existing Boeing 707 aircraft to accept a greater proportion of freight. Work on this is already under way, but involves no new technology.

The uncertainties within BA and other airlines over their pressing needs for replacement aircraft for an introduction into service in the middle to late 1980s has to an extent hindered long-term planning.

The airline would like to take a closer look at a purpose-designed combined freight/passenger aircraft. But decision on this must await the other and more urgent problem of finalising a decision on its new passenger aircraft fleet.

Ideally the airline would like to go ahead with the purchase of derivatives of the British Aerospace BAC 1-11, the Boeing 727, or the latest Douglas DC-8 in response to its most immediate need. In the medium-term it firmly believes it will purchase



A British Caledonian Airways Boeing 707 freighter at Houston Intercontinental Airport. The airline recently introduced a weekly Texacargo service between London and Houston, Texas.

The future for rail

RAILWAYS MAY be a declining industry in Britain and North America. The French, West German, and Japanese Governments may all be talking of cutting back on the growing bill for financial support of their rail systems. But in the world as a whole railways are a boom business.

In the 1950s and 1960s the total volume of freight, in terms of ton-miles, moved by the world's railways grew by about 4.5 per cent. a year, a rate which means that the total business being done doubled within 20 years. The rate of increase may have fallen in Western Europe and North America in the last few years of recession. But elsewhere—in Asia, the Soviet Union, Africa, the Middle East, and parts of Latin America—freight traffic has continued to grow.

It is a business, too, in which large sums are being invested in many parts of the world. According to estimates compiled by the International Railway Journal, around \$U.S.5bn. is likely to be spent on new track or equipment this year by 45 of the world's railway administrations, and this figure does not take into account the sums which will be invested by some of the biggest railway systems such as those in the U.S. and the USSR.

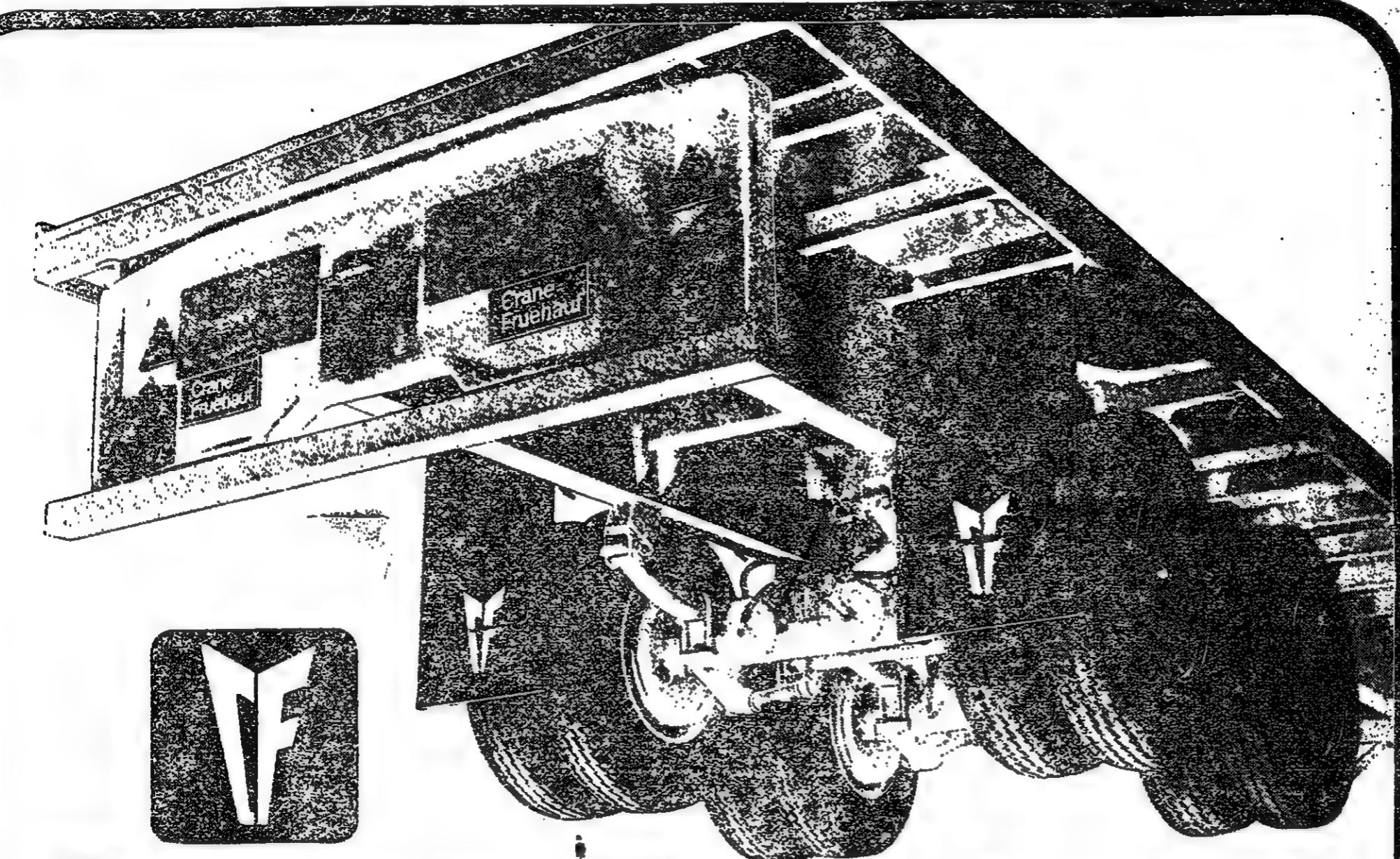
Of this sum, about \$U.S.6bn. will be going on new freight cars and some \$U.S.3bn. will be spent on new or improved track, signalling, and electrification schemes. In Latin America, the Middle East, parts of Asia and Eastern Europe new routes are being laid specifically to carry freight. In the developing countries railways are seen as having a major role to play in the creation of a new, or stronger industrial base. Road-based freight distribution systems are being improved too. But where the distances are long, the loads to be carried are heavy, and the flows of traffic are likely to be substantial; then there is a place for railway construction and modernisation.

Longer

In the industrialised countries, where railways were established a century or more ago, money is being spent to improve freight handling systems. In the U.S. and the USSR where distances are long, in West Germany and France where average rail hauls are a good deal longer than in this country and where a very high proportion of rail traffic moves to or from (or both) private rail sidings, and in similar circumstances elsewhere, the advantages of rail in moving thick regular flows of traffic come into their own. Improvements in track, signalling, rolling stock, and motive power and the adoption of automatic data processing techniques for controlling freight and freight wagon movement—such as TOPS in Britain and GCTM in France—are raising the speed and reliability of full train load traffic and are helping to rationalise what in Britain is called wagon load traffic.

As one would expect, geography sees that rail freight is more dominant in inland transport than in international freight movement. But it is a much more dominant inland carrier in the world at large than might be generally assumed in Britain where rail's share of the market has been falling steadily over the years. According to a recent study by the Transport and Road Research Laboratory, probably about 70 per cent. of all inland freight movements—as measured in ton-miles—the world is by rail. This figure may be boosted by the very large quantities of freight which are moved by rail in the USSR—some 3,700,000 ton-kilometres a year or about half the world's

freight tonnage. Freight rates in Russia are extremely low, as are those made or are being discussed with Japanese companies. Equipping of new container terminals and the operation of container traffic across the Siberian route. Given the Russian practice of quote exceeding low prices for transport by Russian ships and similarly low prices for transport across the USSR, the Siberian land bridge is likely to become an even greater competitive force for Western Europe-Far East freight.



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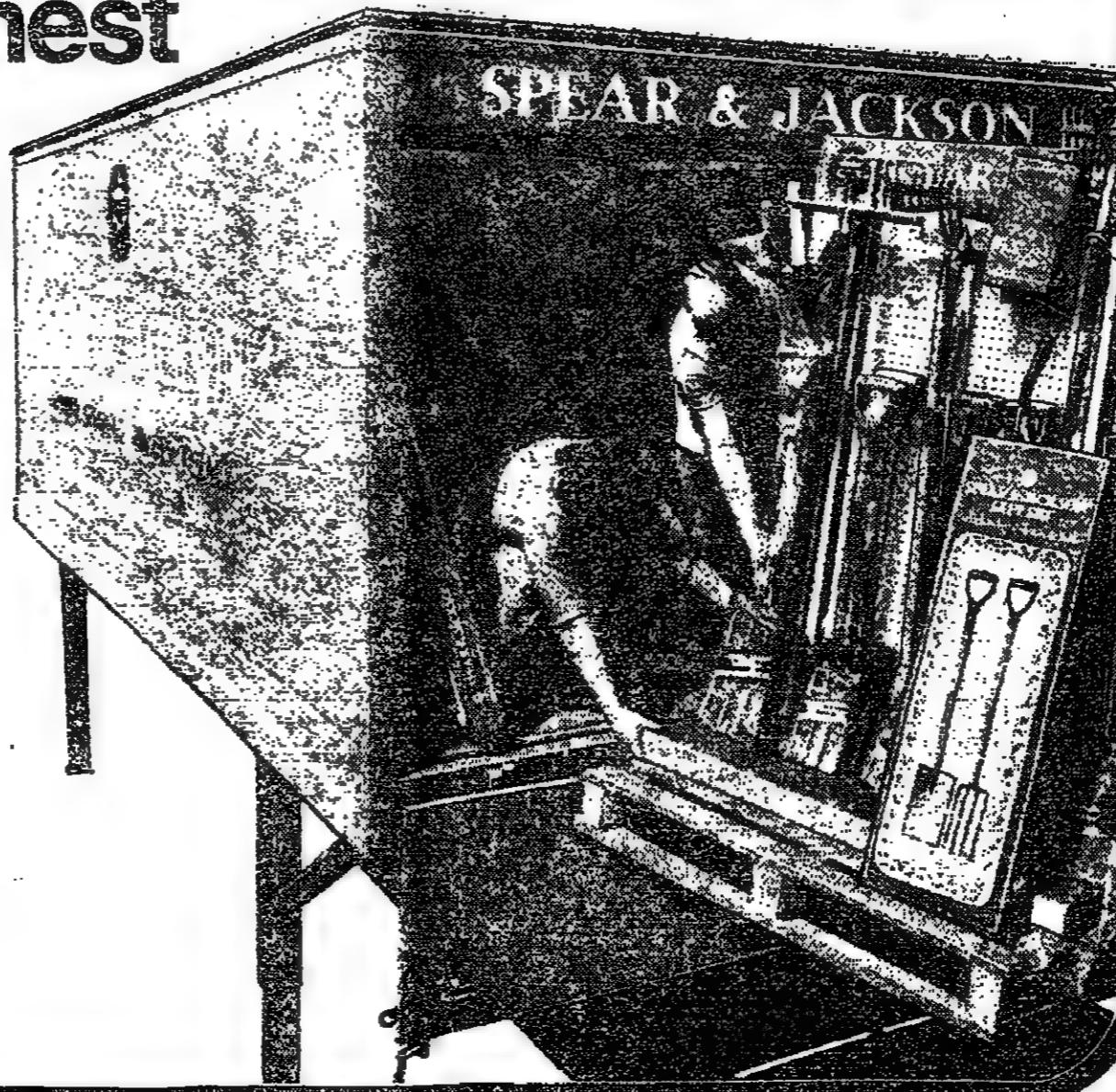
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France's election: a case of Catch 22

By ROBERT MAUTHNER, Paris Correspondent

HVOTERS may be three parties of the Left which for having a good time switch on their of the negotiations on the re-election campaign for the last September only briefly affected their support in the officially opened to-day country. This has been growing, like blowing the wind steadily since the presidential election in 1974, when M. Giscard d'Estaing narrowly defeated M. François Mitterrand, the Socialist leader and joint candidate of the Left, by only slightly more than 1 percentage point.

It can only be assumed that after 20 years of conservative rule, the swing of the political pendulum has been so fundamental that Left-wing voting intentions have become much more firmly rooted. Clearly, too, the frequent and virulent quarrels between the Gaullists and the other government coalition parties were not calculated to woo away even very disengaged supporters of the Left.

Whatever the reasons, the latest French Institute of Public Opinion poll indicates that the Left now stands a very good chance of winning the election if it can master its self-destructive proclivities. Some 52 per cent of the electorate currently intends to vote for the three parties of the Left in the first round, compared with only 44 per cent for the combined government parties—the Gaullist RPR, the Giscardian Parti Republicain and diverse Centrist groups.

Yet, because of the complications of the two-round voting system in France and the un-

predictable behaviour of the acrobatic career, has posed so many conditions for his co-operation with the Socialists and Left-wing Radicals, that the final outcome of the election still remains in doubt.

It is not too much to say that M. Marchais has suspended a sword of Damocles over the election and the future of the country. The public opinion polls are an eloquent illustration of how the Communists' attitude can influence the outcome. According to the same IFOP poll quoted earlier, the parties of the erstwhile Union of the Left will win 252 parliamentary seats against the government coalition's 220 if there is a single candidate of the Left in the second round. This would give them an absolute majority of some seven seats in the 491-member National Assembly and perhaps a little more if extreme Left-wing members are included.

But if the Communists do not withdraw in favour of leading Socialist candidates in the second round, the result would be completely reversed, with the government parties winning 261 seats and the Left only 212.

Because of the impossibility of calculating accurately the way people will split their votes in the run-off, the findings of this poll are necessarily subject to a great deal of caution. They do, however, give a general indication of the Communists' capacity to swing the election.

The reasons for M. Marchais's attitude, which remained shrouded in mystery at the time of the breakdown of the negotiations on the updating of the common programme of the Left, have become clearer with the passing of time. The original theory, that he engineered the collapse of the Union of the Left under pressure from

Moscow, because of the Comintern's distaste for Euro-communism and its purported preference for dealing with Right-wing governments in France which have always put a premium on good relations with the Soviet Union, has never been entirely credible.

Ever since the 22nd Congress of the French Communist Party in February 1976, at which the Communists shed their Stalinist mantle and adopted an aggressively nationalistic line, they have given every sign of being as independent of Moscow as the Italian Communist Party. They have not hesitated to criticise the Russians on frequent occasions for their treatment of dissidents and, during Mr. Leonid Brezhnev's last visit to France in June 1977, the Soviet leader did not even make an attempt to see M. Marchais. As far as can be established, the relations between Moscow and the French Communist Party are no better than cool.

M. Marchais's biggest worry is that his party should not, by associating itself with the Socialists, be drowned in some kind of amorphous social democracy which would undermine the foundations of its support in the country. He has already seen his party subsumed as the leading representative of the Left by the Socialists. Never,

during the 10 parliamentary elections between 1945 and 1973, did the Communist poll fewer votes than the Socialists. But

today, the public opinion polls give the Socialists some 28 per cent of the total vote in the first round compared with the Communists' 21 to 21 per cent.

All the squabbling between the Socialists and Communists over the extent of their nationalisation programme, the costing of their economic and social policies and nuclear defence

can be explained by the Comintern's desire to nail the Socialists to the mast before it is too late. After the election, with the Socialists in a dominant and confident position, the Communists will find it infinitely more difficult to push their policies through against Socialist opposition.

Unfortunately for M. Marchais, things have not worked out as he thought they would. He believed that the tough demands made by the Communists during

the run-off elections had been entirely credible.

Faced with an incessant barrage of criticism and insults from the Communists, M. Mitterrand has never lost his cool.

Though he knows only too well that he is taking a calculated risk, he appears to be convinced that the Communists will at least agree to an electoral pact after the first round if only for fear of being held responsible of provoking the defeat of the Left. And he has steadfastly refused to renegotiate the common programme until after the election is over.

The least that can be said is that the prospects for France after the election are not very bright. If, as M. Mitterrand believes, the Communists will in the end agree to an electoral pact with the Socialists and thus ensure the victory of the Left, a government programme will still have to be worked out.

Even the most committed Socialists and Communists currently look upon it as a difficult task to believe that such an agreement can be reached between their parties after all that has been said. "Just look around Europe," M. Marchais thundered at a mass Communist rally a few days ago. "The Socialist governments of Schmidt, Callaghan and Soames have allowed big business to remain in command."

And even on the improbable assumption that the parties of the Left are able to agree on a common programme, the country is likely very close in the unenviable job stakes.

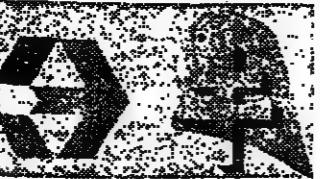


Illustration by J. C. Lévy

Letters to the Editor

Prices

London

are housebuilders and rented with massive in the price of building which is beginning to be of the boom condition—1972—when too much was made available for sale. A simple remedy would be for the Government to issue a code to banks and institutions they were not to loans for the purchase thereby forcing those individuals to use resources in acquiring a directive need not be used from using this collateral for building

London's docks

From the Leader, Greater London Council.

Sir,—David Wright (February 15) covered the current state of play in the redevelopment of London's dockland very fairly, but I think one or two things need emphasising.

What can you do with a Government which promises all possible assistance but stops short of actual help? For every step the Department of Environment takes forward—and there have not been many—the Treasury takes two back. Thus we have been lumbered with a refusal to let Greater London Council back the Transmelli Crow development at Surrey Docks; and it seems that Government will decide whether to lend its own support to the scheme solely on its individual and short-term profitability.

This is patent nonsense. This development is crucial to the whole strategy, not least as an act of faith. Do we judge whether or not to build roads, houses, schools and hospitals solely on whether they make a short-term profit? It is not even as if the Government is being asked for money right now—all that is needed is a long guarantee. This makes it all the more infuriating that the development, rightly hailed as the catalyst for the whole scheme, should be held up and endangered.

Meanwhile the GLC and the firms have recognised the urgent needs of docklands by reigining the machinery. I imply no disrespect to the present docklands team, who have done a magnificent job. When I say that the time has come to change the emphasis, So far we have been in the planning stage; now we need to get on with the physical work.

To do this the team needs to be commercially oriented, for such social questions as need to be decided in docklands can only be left to the politicians and local people.

Soon we will have both the plan and the team complete; we have already made budgetary provision, as David Wright says, for a whole range of infrastructure projects, including the extension of the Jubilee Line; and we have never lacked determination. All we need, I repeat, is help from the Government, even if that amounts only to letting us get on with the job unhampered, which we are more than willing to do.

Horace Cutler,
L. Kent,
Dickinson,
Chemical Works,
Deptford, S.E.8.

adroit

tions

T. Wymer.

his letter (February 15) on the "black list" and import sanctions, Mr. J. H. Jensen states: "If companies operate at a level which enables them to make more than the rest at the same time as the most competitive, then I would have this entirely withdrawn." Now, when and how, I ask?

Dickinson,
Chemical Works,
Deptford, S.E.8.

to-date

elines

L. Kent,
recent months and February 16, there has been concern over supply in relation to lines supplied by the during its visit to London 1976.

I like to draw attention to agreements forecasts made fifteen after, especially after predictable events that occurred since then. I ask

cultural land and family farms. In my opinion the basic problem is significant today.

If we are to be monitored by Dr. Whitehead's team, the Government should at least extend another invitation to the IMF in order that more up-to-date guidelines are established and based on the current state of the economy. Perhaps, in doing so, the monthly money supply consternation and the inherent undesirable volatility in the financial markets—where judgments are being made on facts superseded by events—could be avoided.

L. J. Kent,
38 Ringstead Road,
Sutton, Surrey.

I wonder if it is reasonable to ask Mr. McLeod what exactly he means by "family farms." Is he suggesting the European definition where "the family" supplies all the labour as well as the capital; or more possibly he may be using the American one where "the family" supplies the capital but the labour may well be paid employees?

In the former case, I wonder what possible reason he can supply to suggest that family farms produce a greater output than others. If the latter description is intended then I fall to see any possible way in which they should produce more than any other comparably managed farms.

Mr. McLeod has also missed one vital factor in pension fund investment. A major portion of their purchases is from owner-occupiers on a "sale and lease-back" basis. This provides much

needed extra capital investment into agriculture for who else to-day other than the institutions can have the slightest interest in purchasing tenanted farms?

The Act in November 1976, purportedly backed by the National Farmers' Union, giving effective perpetual security of tenure to farm tenants, will prove to be one of the most misguided and harmful legislative acts that the farming industry has ever had to bear. The sad part is that one cannot find a single progressive tenant farmer who thinks it is in any way good for the industry. This Act together with equally harmful tax discrimination against landowners, when combined with owners' occupiers, has signalled the beginning of the end of the landlord/tenant system which has been the historic reason for the success of British agriculture.

Obviously all human endeavours require "judgment and opinion" in coming to "a true and fair view" but any discipline, to be described as such, requires a "scientific language and framework of concepts," for the subject through which professional opinions and decisions are mainly derived.

Accounting does not even have a "scientific language" with which to describe the problem set to which it is supposed to address itself, and worse still its practitioners do not recognise the need for one.

The accountancy profession has in my experience been distinguished by its (unsuccessful) attempt to obtain professional education and its rules and codes of accountancy practice on the cheap.

E. A. Lowe,
Division of Economic Studies,
University of Sheffield,
Sheffield.

An innovation council

From the Managing Director,
Merchant Inventors
International.

Sir,—The announcement (February 15) that the Government grant to the Arts Council has been raised for the year 1978-79 by £7.3m. to £49.5m. highlights the need for the support of individuals in other creative areas such as new product design and innovation.

If, however, one accepts (and many will not) that employment is higher on the nation's list of priorities than entertainment, the Government might reasonably be expected to give some thought to the fact that there are individuals whose "forte" lies in the field of product design and innovation who receive no support from Government.

The method chosen by the present Government may not be the most desirable, but surely it is better that control should be wielded by the representatives of the people, however inadequately elected, rather than by the brute use of non-elected monopoly power.

(Mrs.) S. Liddell,
Dormans Corner,
Lingfield, Surrey.

Sorting out the standards

From Professor E. Lowe

Sir,—It is surely misguided to suppose as Mr. C. W. Foreman appears to (Sorting out your standards, February 8) that accounting standards can be a cure for both the welter of "misinformation" that is released into society by the accountancy profession and for its present low status and credibility as a profession.

A. S. L. Owensmith,
87 Burgh Heath Road, Epsom,
Surrey.

To-day's Events

GENERAL

Defence White Paper published. Dr. David Owen, Foreign Secretary, holds talks in London with Rhodesian nationalist leader the Rev. Ndahamidia Sitole.

ECC Finance Ministers meet, Brussels.

Scottish National Party MPs meet in Glasgow to discuss their tactics for third reading of Scotland Bill in House of Commons on Wednesday.

Mr. Alfred Atherton, U.S. Assistant Secretary of State, due to arrive in Jerusalem.

Transport and General Workers' Union tribute to Mr. Jack Jones, its retiring general secretary, Royal Festival Hall, S.E.1. Those attending include the Prime Minister and Mr. Len Murray, TUC general secretary.

TUC Finance and General Purposes Committee meets.

Dr. Joseph Luns, NATO secretary-general, speaks on "The Future of NATO" at European-Atlantic Group meeting, House of Commons.

Nominations close for Ilford North by-election (polling day March 2).

Princess Anne attends Farmers' Country dinner, Mansion House, E.C.4.

Mr. Robert Felli, chief executive of the Stock Exchange, and Mr. David LeRoy-Lewis, a former deputy-chairman of the Exchange, begin two-week visit to U.S. to study regulatory procedures in American stock markets.

Rules governing sale of TUC general secretary.

chase Assistance and Housing Corporation Bill, and Employment Subsidies Bill, second readings.

OFFICIAL STATISTICS

Preliminary estimate of gross domestic product based on output data; and turnover of motor trades (4th quarter).

COMPANY MEETINGS

See Week's Financial Diary on page 5.

BALLET

Royal Ballet dance La Bayadere, A Month in the Country, and Elite Syncopations, Covent Garden, W.C.2, 7.30 p.m.

MUSIC

Philip Pilkington (piano) in recital of works by J. S. Bach and Beethoven, St. Lawrence Jewry next Guildhall, E.C.2, 1 p.m.

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Consumers feel more cautious about future

BY ELEANOR GOODMAN, CONSUMER AFFAIRS CORRESPONDENT

A SLIGHTLY more cautious view of the future is reflected in the latest survey of consumer confidence carried out for the Financial Times.

After the exceptionally confident feelings shown in January, consumers were feeling less optimistic at the beginning of this month. But people are feeling more secure than a year ago, and the long-term trend is still improving.

In January, two of the main indices reached new heights. This month they have slipped back slightly and worries about unemployment have increased.

The survey is designed to find out how people feel about the future and their present financial position.

Movements in the indices usually take three to four months to be reflected in buying patterns. The six-month moving average figures used in the table are a better guide to long-term trends than the monthly figures which, as this month's figures show, can fluctuate widely.

The one-month improvement was most noticeable in the Past Prosperity Index which tries to establish whether people feel better or worse off than a year ago.

January was only the second month in seven years in which the number of people feeling better off outnumbered those feeling worse off. This month, those feeling worse off were again in the majority.

Inflation

Just over one-third of the sample said they were less affluent than a year ago and 27 per cent said they were better off. This gave a balance of 8 per cent who felt their incomes had not kept pace with inflation.

Among the professional men interviewed, the balance of those feeling worse off was slightly smaller at 3 per cent, but this was still deterioration on January.

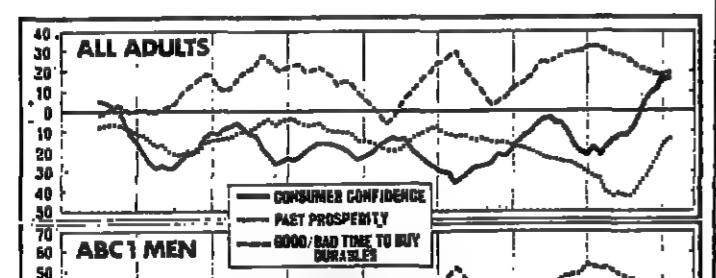
Of all the categories, women from working class backgrounds were feeling worst off.

The six-month moving average figures for Past Prosperity are still improving, however, as people were feeling much more badly hit by inflation seven months ago.

The Future Confidence Index also reached a new height last month. This month it has fallen back sharply though it is still well above last February's level.

Asked whether they expected conditions to get worse or better over the next year, 29 per cent said better and 22 per cent worse, giving a balance of 7 per cent. Who thought things would improve. This is slightly lower than the December figure.

This gloomy view of the future was expressed by all types of people.



Price Commission seeks industrialist

THE DEPARTMENT of Prices has approached tentatively several industrialists to see if they would be prepared to fill the vacancy on the Price Commission created by the impending departure of one of three deputy chairmen, Dr. Gordon Hobday.

Dr. Hobday, the chairman of Boots, has told the department that he wants to leave the Commission because the job—technically a part-time appointment—is too time-consuming to fit in with his other commitments.

PLAXTONS

Luxury Coach Body Builders

A Year of Progress

Results for the period ended 2nd October 1977

	1977 (57 weeks)	1976 (52 weeks)
Turnover	£17,368	£12,533
Profit before tax	£1,637	£933
Profit after tax	£769	£449
Earnings per share	26.0p	15.2p
Dividends per share	7.8p	6.5p

- ★ Turnover increased by 26% with pre-tax profits up 60% on an annualised basis.
- ★ Exports up from £470,509 to £1,040,209.
- ★ Capitalisation issue creates trustee status.
- ★ Current year started with a full supply of work in all divisions.

PLAXTONS (SCARBOROUGH) LIMITED
Castle Works, Seamer Road, Scarborough YO12 4DQ.

TREND OF INDUSTRIAL PROFITS

Rise of 43% in earnings on tax charge stability

THE TREND of industrial profit figures below is based on accounting periods ending in late spring and early summer, so the sample of 223 companies is small and the figures should be interpreted with caution.

Given that provision, one of the more striking features is the way that the stability of the tax charge boosted earnings. While pre-tax profits rose 22 per cent, the tax charge only rose 4 per cent. Consequently, earnings made a 43 per cent leap.

At its extreme, this trend was exemplified by the contracting and construction sector where a fall in pre-tax profits was translated into a rise in earnings by the dramatic drop in taxation.

The only other two sectors with enough results to be at all reliable were clothing and footwear and engineering. The clothing and footwear sector performed particularly strongly, having a 36 per cent jump in trading profits which came through, after only a small increase in tax, to a doubling of earnings. Engineering, however, generated a gain at the trading level of only 2 per cent, and the earnings improvement was of the same order.

The cash flow for all the industrial companies showed a substantial improvement of 34 per cent, and this was reflected in a 21 per cent rise in net current assets. But net capital employed rose more sedately at 14 per cent.

TREND OF INDUSTRIAL PROFITS ANALYSIS OF 223 COMPANIES

The Financial Times gives below the table of company profits and balance-sheet analysis. This covers the results (with the preceding year's comparison in brackets) of 223 companies whose account year ended in the period between April 15, 1977, and July 14, 1977, which published their reports up to the end of January, 1978. (Figures in £000.)

INDUSTRY	No. of Firms	Trading Profits before Int. & Tax	Pre-Tax Profits	Tax	Earnings before Dividends	Div. Dividends	Cash Flow	Net Capital Employed	Net Current Assets
BUILDING MATERIALS	4	39,345 (25,542)	+26.6 (-17,169)	20,202 (14,126)	7,014 (8,589)	12,952 (5,227)	-14.8 (6,355)	8,497 (3,714)	-35.7 (102,228)
CONTRACTING & CONSTRUCTION	17	81,473 (84,671)	-8.7 (-28,714)	24,668 (22,790)	18,007 (12,309)	12,674 (10,274)	-28.4 (5,857)	4,265 (3,986)	-7.8 (135,341)
ELECTRICALS	7	8,054 (6,587)	-23.4 (-8,527)	6,657 (4,782)	6,104 (4,243)	3,277 (3,558)	-89.0 (1,320)	1,543 (1,320)	+16.8 (11,850)
ENGINEERING	21	85,548 (64,529)	+2.8 (+8,912)	56,765 (50,397)	52,201 (44,329)	15,625 (14,644)	-1.6 (-4,033)	4,583 (4,033)	-13.6 (16,024)
MACHINERY TOOLS	1	594 (570)	-21.8 (-412)	513 (521)	413 (445)	198 (178)	+13.1 (-1.47)	52 (228)	-10.6 (1,148)
MISC. CAPITAL GOODS	8	31,476 (35,959)	+31.4 (-10,059)	25,987 (20,172)	20,172 (18,048)	14,338 (12,214)	-18.7 (-3,186)	4,158 (3,186)	-9.8 (14,812)
TOTAL CAPITAL GOODS	56	149,584 (185,998)	-10.0 (-10,059)	97,184 (85,468)	97,184 (85,468)	57,559 (50,893)	+80.0 (-15,981)	20,076 (18,081)	-23.1 (60,231)
ELectronics	6	17,519 (18,466)	-30.1 (-8,821)	9,244 (4,285)	7,486 (2,184)	2,583 (2,053)	-146.3 (-1,227)	1,402 (1,227)	-14.8 (11,496)
HOUSEHOLD GOODS	10	15,090 (13,845)	-5.6 (-5.030)	9,487 (9,388)	8,045 (5,882)	5,576 (4,364)	-4,418 (-1,805)	1,287 (1,805)	-5.3 (5,658)
MOTOR VEHICLES	2	11,841 (8,184)	-37.4 (-6,136)	8,676 (5,198)	5,775 (3,718)	3,491 (2,485)	-52.9 (-2,485)	1,036 (1,490)	-11.4 (4,491)
WVOTUNES & COMPONENTS	—	—	—	—	—	—	—	—	—
MOTOR DISTRIBUTORS	—	—	—	—	—	—	—	—	—
TOTAL CONSUMER DURABLES	18	41,800 (35,449)	+17.9 (-22,387)	27,407 (26,771)	22,239 (20,734)	9,880 (8,587)	+48.5 (3,027)	8,875 (8,027)	-21.6 (21,228)
BUTCHERIES	3	56,637 (50,715)	+11.7 (-8,051)	47,986 (46,051)	43,393 (38,185)	21,420 (18,925)	-22.4 (-6,820)	9,503 (8,420)	-10.5 (19,553)
DRUGGISTS & PHARMACEUTICALS	2	3,993 (2,748)	+19.8 (-2,866)	2,706 (2,386)	2,884 (2,058)	1,082 (1,068)	-45.0 (-6,653)	811 (779)	-11.5 (1,087)
HOTELS & CATERERS	2	8,272 (1,628)	+24.7 (-1.498)	8,891 (8,965)	8,891 (8,472)	718 (4,811)	-46.2 (-189)	189 (1,128)	-11.2 (757)
LAUNDRY	7	118,876 (94,240)	+23.8 (-26,704)	92,709 (76,904)	77,063 (65,645)	37,815 (34,711)	-25.8 (-8,293)	10,953 (7,264)	-46.3 (44,581)
ZOOD MANUFACTURING	7	84,781 (80,107)	-15.5 (-23,246)	89,421 (80,420)	85,083 (81,545)	11,981 (11,645)	12,887 (9,554)	+25.2 (8,564)	-19.8 (10,605)
ZOOD RETAILING	8	59,894 (40,112)	+48.1 (-11,588)	46,983 (38,831)	45,867 (38,831)	15,129 (13,421)	-104.4 (-13,421)	3,177 (4,812)	-20.1 (31,570)
NEWSPAPERS AND PUBLICATIONS	3	4,644 (3,751)	-28.1 (-2,306)	5,182 (4,848)	5,282 (4,048)	1,177 (1,108)	-7.8 (-97)	1,787 (1,574)	-12.7 (2,258)
PACKAGING AND PAPER	3	6,645 (5,781)	-34.3 (-5,816)	5,287 (4,780)	5,284 (4,001)	2,750 (2,750)	-41.5 (-1,750)	443 (391)	-13.5 (2,154)
TIMES	10	14,482 (11,686)	+23.5 (-11,686)	11,474 (10,888)	10,491 (9,687)	4,884 (4,687)	+53.0 (-1,156)	2,051 (1,708)	-28.6 (5,615)
CLOTHING AND FOOTWEAR	19	21,827 (15,819)	-36.1 (-12,192)	17,832 (10,216)	14,975 (10,782)	6,519 (5,782)	-103.8 (-1,153)	1,857 (1,353)	-29.6 (2,921)
TEXTILES	7	11,860 (9,729)	-15.7 (-7,722)	9,646 (6,898)	8,470 (5,887)	3,650 (3,687)	-50.0 (-3,165)	4,744 (3,977)	-12.7 (5,297)
TOBACCO	—	—	—	—	—	—	—	—	—
TOYS AND GAMES	1	4,791 (3,597)	-41.0 (-3,597)	3,968 (2,790)	5,508 (2,421)	265 (1,198)	-180.3 (-1,243)	443 (312)	-42.0 (-1,286)
TOTAL CONSUMER NON-DURABLES	72	354,775 (268,710)	-24.6 (-216,429)	274,497 (188,444)	199,597 (102,674)	124,807 (84,041)	-48.5 (-29,131)	59,870 (49,592)	-24.3 (138,564)
TRADICALS	4	112,448 (95,775)	+17.4 (-8,577)	100,004 (84,597)	91,718 (76,958)	45,128 (39,954)	-28.4 (-35,531)	9,155 (8,285)	-11.1 (9,186)
OFFICE EQUIPMENT</td									

FINANCIAL TIMES REPORT

Monday February 20 1978

CONFERENCE CENTRES

Both internationally and domestically the conference market has shown remarkable vitality against a faltering economic background. Now the industry is thinking in terms of a renewed boom in convention business.

Sing

five years with a large amount of trading down for such occasions as annual dinners and corporate receptions. Thus, rate conventions, with international companies placing a reasonable well, there is events which attempt to create many a banqueting/conference manager who would prefer among employees who are normally separated by considerable distances and often considerable cultural differences.

It's little doubt that a years ago the international conference and exhibition stood a little. There had been a sliding as a result of optimism and com- as growing. At the world economy wobbles. The lead conference planning is many in the business turned that the un- of 1974-78 would in to show in the f 1977-78. In fact the ion has proved worse fact. Convention and traffic has kept up well in spite of the problematic environment in which the inter-business community is at the moment.

It can be said of the conference business seems to be as ever. However, overlapping—much to the irritation of some tax authorities, mewhat by the over- notably the Americans. Conferen- conferences and expositions are frequently staged in exotic (Birmingham and London banqueting, partic- are exotic if you live in Los Angeles), locations partly be- adly during the past cause attendance at them will be

Optimism

With the optimism that abounds in the industry at the moment ("There is plenty of business to be had. The more complicated the world becomes the greater the need for people to communicate," says Mr. Stan Fewster, director of the British Association of Conference Towns) it is not necessarily being churlish to ask if there are any concerns for the future. Naturally enough there are, but perhaps only small niggling doubts.

The first, naturally enough, revolves around the continued world recession. With the U.S. still not back to its eager-beaver attitudes of the sixties, and the stronger western economies apparently unwilling to take a major plunge into inflation, there is concern that the sort of recovery which would indeed provide boom conditions in the conference business is still some years away. However, conven-

tions seat price war which has been so much a feature of the market. Once demand soaks up supply on the longer haul routes then it is likely that air fares will rise again somewhat faster than the average inflation rate of the nations they serve. At the moment the air content of some foreign convention packages is not necessarily a deterrent, but the conference business may have to learn to live with somewhat tougher demands from the airlines in three or four years' time.

Another continuing concern is the attitude of tax authori-

Wembley Conference Centre.



hard hit. Until now perhaps no one has been as severe as was feared. Many Americans had not realised that Canada was a foreign destination.

Elsewhere the impact has not been as severe as was feared (but ssh! in our eagerness to get the rules changed we are not supposed to admit that).

The rule does have its lighter side. Apparently the American taxman has declined to define what he is going to accept as proof of attendance at the conference for which tax deductions are being claimed. Each delegate must attend, and prove attendance, for a certain number of hours each day. I am assured that some Americans are seeking, and being supplied with, timed photographs of business sessions with their own hard working faces displayed well to the fore.

Most people seem to agree that the negative influences over the conference business are currently outweighed by the positive ones and in the foreseeable future growth in traffic is likely to be the order of the day. Certainly as the conference business itself increases in sophistication, and conference centres offer more complete packages, then the attractiveness of conferences themselves increases. It is unlikely that the need for personal contact and exchange will diminish.

Although there is talk of the rules being relaxed, the fact that the dollar is anything but healthy at the moment, and that the market would appear to be set for continued development.

This Report was written by Arthur Sandes

tion traffic has been such recently as to suggest that even without full economic revival there will still be enough work to go round.

Perhaps more immediately worrying, particularly to those in the large scale long haul conference market, is the question of air fares. After those years of recession, during which period the airlines of the world have built up considerable surplus capacity, air fares are currently extremely low by the standards of a decade ago. When airlines talk of a round trip fare of less than £200 to Los Angeles from London this may be good news to the traveller, but it indicates an attitude close to sell-at-any-price on the part of the supplier.

Recently there have been signs of a wide revival in the air travel market. Already in Britain, for example, it is suggested that this summer will see the end of the short-haul treatment, have been particularly

teries, with rumours flowing about other countries possibly following the example of the Americans in taking a tough line towards conference spending. Broadly speaking American business people are allowed two foreign conferences a year; can only claim tax deductions on tourist class air travel; and must limit their deductions to the expenditure allowed by Washington for its own employees when they are travelling abroad. Since the last allowance in London was \$48 a day in London (and less than \$30 at the last count, and this sum has to include all spending not just hotels) it is hardly surprising that American Government groups only seem to come for fleeting visits.

The impact on some destinations of this rule, introduced a little over a year ago, has been dramatic. The Canadians, who had sought special treatment, have been particularly

Battle of the cities

CLEARLY it is one thing to build a convention centre, it is quite another to fill it. If there is one thing that follows all the publicity material about "why Bloggsville needs a convention hall" as sure as night follows day, it is a mountain of advertising literature urging organisations to make their bookings. Convention centres may bring considerable benefits to a community, but they can also bring problems, not the least of them administrative and financial.

The rush to build convention halls worldwide has led to fierce rivalry between towns. The battle has no respect for boundaries. London, Paris and Hong Kong will all be in there fighting for the next meeting of the Atlanta Widgets League. The greatest attraction, of course, is the amount of money that conference delegates spend and the fact that they are likely to spend it at otherwise quiet times of the year. Although it is true that this is the time when they are quoted the lowest room rates, it is also the case that conferences are rarely staged at a time when the delegates would otherwise be on holiday with their families. An average conference delegate spends much more than a tourist from the same country. London, largest conference destination in the world, earns

something like £100m. a year from conference delegates.

The cities themselves are not alone in their fight for traffic, in this they have allies in the hotel groups, airlines, ground transportation interest and, of course, the convention centres themselves. In all these fields life has grown more aggressive over the years.

Time was when convention centres were thin on the ground. Large American cities had the notion spread over the years. However, it was the development of mass air travel, and notably the introduction of the Boeing 707 jet in the late fifties, which revolutionised the business. Suddenly it became possible to cast the net wider, and thus to organise bigger conferences in more distant places. It was therefore in the sixties that the major modern meeting places started to come on stream, a rapid expansion in capacity which continued into the seventies and might now have slowed but still proceeds. Rotterdam, Hong Kong, Manila and Torremolinos all jumped on what promised to be a lucrative bandwagon. The huge McCormick exhibition and convention centre went up in Chicago and the National Exhibition Centre was planned for Birmingham, England. The growth of supply in

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CONTINUED ON PAGE II

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ALTHOUGH central London is still without its modern purpose-built exhibition/convention centre (but better news of that later) several projects have been coming on stream recently. Wembley and Brighton are now firmly established, as is the National Exhibition Centre at Earls Court for its business, but it is between them provide about Birmingham. Several other a spectacular piece of initiative developments will be coming which deserves success.

In this specialised field of sites; but within a year, five, large exhibition centres of London's biggest shows, including the Motor Show and Furniture Show, has moved to NEC—which also started to take other events from Brighton, Blackpool, Harrogate and elsewhere. The loss to Greater London of events of this nature is serious, and has underlined the problems of maintaining a competitive facility here to withstand the attraction not only of Birmingham, but of other new exhibition halls developing both in the U.K. and abroad.

There is no question but that much of this new capacity was desperately needed. Many old conference halls have done sterling work, and will almost certainly continue to be used, but there has been an awful lot of cracking at the seams. While the conference halls themselves are serviceable enough for many uses, their lack of flexibility and poor services in such essential fields as catering and toilet arrangements have proved an embarrassment at times. It may have come as something of a culture shock to see union conferences, traditionally staged under chandeliers and surrounded by fading paintings, held instead in air-conditioned carpet-clad comfort, but the adjustment is rapidly made.

Incentives

The new city conference centres have been added to a large stock of modern convention and exhibition facilities which sprung up in hotels as a result of the hotel building incentives scheme of a few years ago. Much has been said about the bedroom capacity that this scheme provided, but an extremely useful spin-off has been the provision of a considerable amount of small-to-medium-sized conference space both in London and in provincial centres.

The total meetings business in Britain will probably be worth more than £300m. this year, although precise figures are difficult to find in this highly fragmented business. For some towns the market is of considerable consequence to both the local business community and the ratepayers. Brighton may have seen nearly £1m. on its new conference centre, but that is less than the annual spend of conference delegates in the seaside town anyway. This year Brighton reckons that spending will jump to £15m. or more. The average spend of a delegate in the town during a three and a half day stay is £90, which puts him in a much more attractive league than the normal run of day tripper.

Of course, investment in centres is not without ancillary worries. Birmingham may be

provided with a further 100,000 square feet in new centre but it has raised some eyebrows with its increased rates and has been challenged London's long standing of watching staffing levels in order to keep leadership in trade shows

and move into profit by 1983-84. "Until then (1976) Earls Court and Olympia, which

is the NEC is having to work hard for its business, but it is between them provide about

the same floor area as Birmingham, had been Britain's prime

development into fruition soon and, doubtless to the delight of those who feel that the South has had a NEC's main domestic rival is, London's share of the traffic in the of course, London and specific past, much of the expansion is ally Earls Court. The capital seems to have backed off from coming from the north, which is attempting competition with the NEC in the London (with a capacity of 2,000) and that at Bognor Regis (550) will soon be in operation. It is projects such as Summerland in the Isle of Man (2,000), Blackpool (1,500) and Harrogate (2,000) which will be providing the bulk of the new facilities.

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Instead the London Convention Bureau floated the idea of Greater London Council investment in Earls Court renovation, an idea that seems to have delighted Town and City Properties, the exhibition centre's owners. The LCB pointed to Brighton's spending on its new facilities, talked of Harrogate spending £6m. and of Aberdeen investing £5m. It voiced its alarm in no uncertain tones: "The opening of the National Exhibition Centre

a minimum GLC investment of £5m., "the minimum amount seen as necessary to make a worthwhile improvement." But the significant suggestion was that another £5m. should be spent in extending the Earls Court exhibition area by a

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What the LCB has suggested is that in addition to the £1m. which Town and City Properties itself is spending over the next three years, there should be a

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Figures for the year show that a total of over 300 events

have been held in the Centre, one of which booked the whole

building for 21 weeks. Con-

ferences were attended by

350,000 visitors. It is estimated

that approximately 45,000 of

these delegates and visitors

came from abroad and that they

represented £6m. of invisible

earnings (including hotels,

shopping etc.). Some of these

events they came to would have

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the Continent by Wembley's new

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CONFERENCE CENTRES III

Days in the country

SCENICALLY
ONLY the larger the simple spin off that might be expected. This small covered that there is corporate conference frequently involves personnel who are well used to very high standards of many of the countries of the larger accommodation and catering. Money is not usually the major obstacle, but the hotels have been found there is a need for pleasant, often question must have fully equipped rooms, pleasant meeting facilities and a restaurant of a very high standard indeed. Often the hotels involved are those that find their way into such elegant listings as the Relais de Campagne and the British Tourist Authority Recommended Hotels.

country hotel, of course, has more than welcome facilities for week-end visitors for the small is not necessarily by a convention with 300 dele-

gates, so a conference of only 15 people can quickly take control of a property with say 30 rooms. Couples who have sought out their own quiet country retreat are not particularly enthused by brandy-drinking, late-night groups that can easily emerge from even a small gathering. The conference people themselves too, often do not wish to stand out among the visiting crowd, preferring instead to mix with the normal hotel guests.

Marketing

The marketing of this sort of operation is a slow, if finally rewarding, business. Some of the larger operations which have carved themselves a name for the retreat-type of gathering, such as the Selsdon Park Hotel near London, can run modest advertising campaigns. For most, on the other hand, it is a matter of cultivating personal contact.

Since the man who makes the final decision is going to end up bringing his closest business colleagues and their wives along to meetings he is likely to take some care in making the final decision. But that decision, when taken, has every chance of being a long-term one. Small conference business tends to be extremely loyal. A good country hotel operation can find itself with a list of companies who hold meetings for 10-20 people as often as monthly, and also use the hotel for small, intensive training courses. It does mean being willing to offer rooms in the peak season as well as the winter, but the investment is very worth while.

One type of accommodation which also tends to be in pleasant surroundings and does not suffer from the difficulty of wanting to turn away convention business in high summer is within the universities. Turning over the campus to holiday

facilities. My own love, the Irish west, has an impressive array of accommodation and, if you like that sort of thing, you might be pleasantly surprised at how many recently built fully equipped modern hotels there are in the area.

The trouble with Ireland is the additional temptations. Whatever else you are a long way away from, you are never very far from fishing, golf, horseback riding and those amazing village pubs. It's all a bit distracting if you are trying to get on with some business, but, after all isn't a conference meant to inform, entertain and also relax?

Even greater escape can be had, of course, by chartering a ship. Most shipping lines are actively involved in the convention business, willing to sell part as well as full charters. It is not always realised that cruise companies are often quite keen to sell space at special rates, particularly in the shoulder months, to convention organisers.

Like the small hotel, no company particularly wants a convention which is of such size as to disturb the life of the rest of the passengers, but even quite large gatherings can be interrupted unless the organiser is determined that everyone should wear large badges or even corporate uniforms. I was recently on a cruise where a large section of the passengers were a religious group concurring (needless to say they were Americans). The only irritation was that since their rules did not apparently ban either drinking or dancing it was extremely difficult to tell who was a conventioneer and who was not.

The more ambitious can always rent the QE 2 or the Canberra for a week or so — at least you know that the delegates or employees cannot actually leave in the middle of things.

The real growth market, however, is in more modest affairs, with getting away meaning simply country air, country food and a chance to talk in a relaxing environment. It is a business which is attracting an increasing amount of interest.



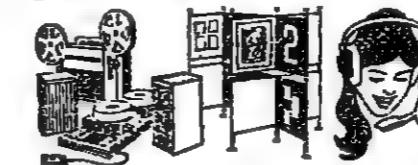
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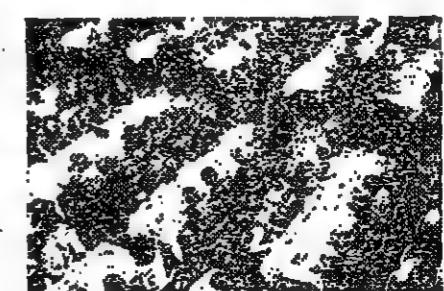
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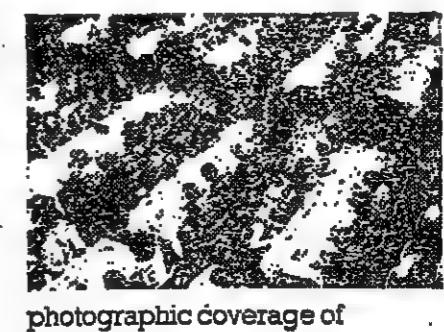
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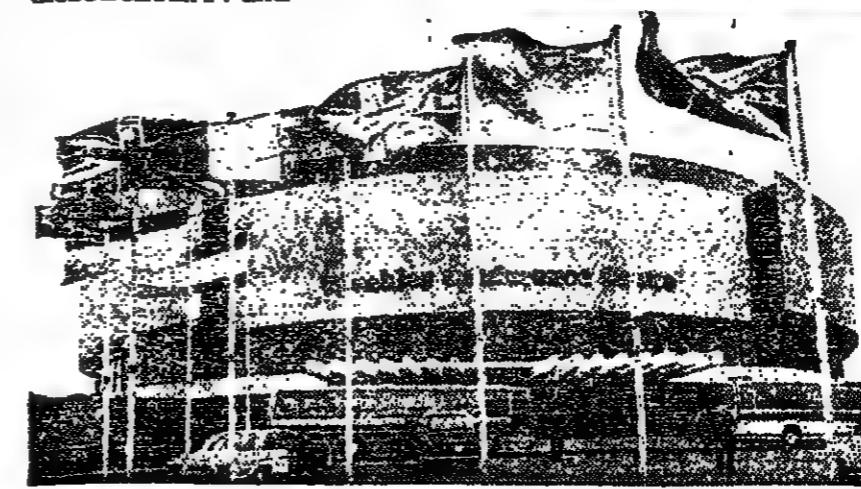
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In many industries there are numerous companies for whom modern facilities has probably now reached the stage where, in a buyers' market, the consumer is very much in a position to ask for rather more than just to latest in seating and audio-visual systems—and most buyers do indeed seek more.

Increasingly, as a result, the city convention bureau is of paramount importance in securing the business. This is simply because the convention bureau tends to act not only as an initial stimulant to choice-making the sales pitch that produces the first inquiry—but also as a co-ordinating centre throughout the planning of the conference or exhibition itself.

Not least this is because a large conference will be seeking all manner of fringe benefits as a result of bestowing its customs on a city. In its crudest sense this will involve seeking a direct subsidy from the city itself, but more often in quoting a base price per delegate and asking the city to ensure that everything can be provided for that price.

Obviously this involves a considerable amount of co-ordinating work. A typical international conference might say that for \$40 a day it wants the conference facilities, coffee, meals, road transfers to and from hotels, a couple of cocktail parties and a night at the theatre. Now the city fixes all that with the price allocation is a matter for long sessions between the various parties involved and the convention bureau—the conference organiser, who may be 10,000 miles away and "organising" the event in his spare time anyway, is in no position to become directly involved in the arguments.

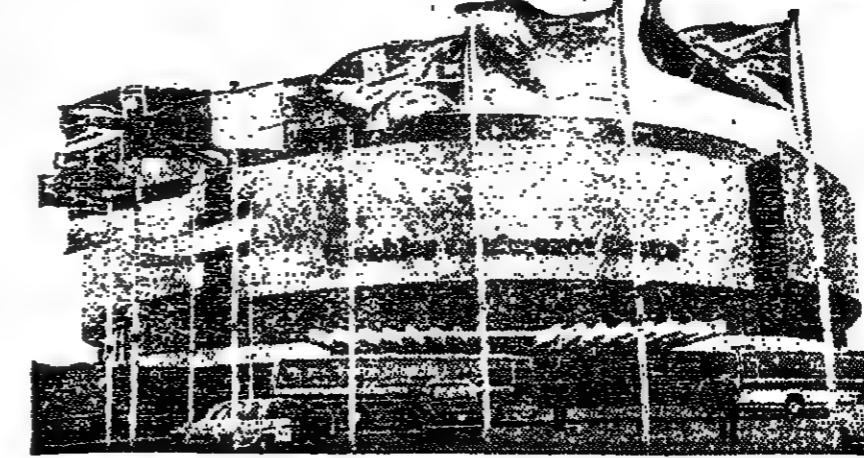
Frequently, of course, some of the bill is picked up by organisations eager to impress the delegates. Thus I have been dined (with several hundred others) by General Motors at a motor industry gathering, lunched by Disney at a travel congress (this time the total was 2,000) and offered refreshment by Rank at Cannes.

In spite of all this rivalry it is surprising how friendly the major cities of the world are.

The convention bureau heads all seem to know each other very well and be willing, occasionally, to pass business around. This is not quite as stupid as it sounds. An international conference that goes to Hong Kong, for example, in 1978, is unlikely to pick the same part of the world in 1979 and therefore Rotterdam, Helsinki or Harrogate are much more prominent candidates.

Thus a sort of convention malfeas builds up which ensures that a conference is not allowed to slip out of the circuit.

First seen from the outside it is an impressively high-powered and sophisticated marketing world, one of fierce competition perhaps, but also one with a degree of old world gentility—not that anyone is beneath spreading a 'mour or two about a rival's inflation rate, or rain record.



OVERSEAS MARKETS

EUROBONDS

Dollar decline sets the pace

THE EUROBOND market reacted to last week's re-acceleration of the dollar's fall on the foreign exchange markets in a manner which is now only too familiar: dollar bonds fell, ending the first sustained sign of stabilisation in this sector since the autumn, while D-mark and Swiss franc bonds in particular roared ahead.

The dollar fell to DM2.0517 last Friday, down from DM2.1080 a week earlier, and to SFr.8860 (1.9505). Among Swiss franc foreign bonds, the recent Citicorp issue ended the week at 105%, up from 105% a point to 104% per cent. This new 4% per cent coupon level was reaffirmed in Friday's announcement of a new Japanese convertible, for Nissin Steel.

The 5% per cent coupon scheduled on the EIBX issue is the lowest yet for the issuer, which was the World Bank's 5% per cent to yield 5.56 on the 10-year, which was priced only two weeks ago.

In the Yen sector, three issues announced last week included a large Y50bn (about \$210m) for Venezuela, for which WestLB will be lead manager.

In the dollar sector only \$55m. marks a new low point for yields. However, the higher worth of straight bonds remain on offer, although the European offerings announced subse-

quently suggest that this was more a tribute to Australia's York via Merrill Lynch.

Special popularity with investors

than an indication of a general and the other in 1995.

In the D-mark sector, the final terms on issues priced last week confirm a further erosion of the yield levels. The New Zealand offering was priced at 104% despite having a DM50m. increase and a one-year extension of the maturity since it was originally due for scheduling a month ago.

The most spectacular change was in the Fujitsu convertible, which started trading at a premium of about three points despite a last minute coupon cut of a last

point to 1% per cent. This new

4% per cent coupon level was reaffirmed in Friday's announce-

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Special popularity with investors

than an indication of a general and the other in 1995.

The main surprise continues to be the lack of new borrowers wanting to take advantage of the current strength of the floating rate note market. The one bond on offer, announced over the weekend, is scheduled to be placed solely via a Far East consortium. The rate will be tied to a quarter point above the Singapore offered rate—Asian issues and loans are usually priced on the London inter-bank rate, which tends to be lower than the Singapore rate.

In the dollar secondary market, the main developments of the week were the sharp falls in

Massey Ferguson and Reed

bonds, in the one case following

the passing of the dividend on

the preference as well as ordinary stock and in the other due

to fears over Reed's Canadian

operations.

The 10% per cent indicated on the bonds and indicated pricing of "at or around par" make the terms identical with Rowntree Mackintosh and Sears, both of

which were bid at a discount of

about 1% points on Friday.

Although the final maturity is somewhat longer than on these other two recent British corporate issues, the average life is marginally shorter due to the operation of a sinking fund

which starts in 1982.

On the basis of the average life, the closest comparable gilt-edged issue, the 7% per cent due 1988, is yielding 10.19 per cent. The Treasury 13 per cent of 1990, however, yields 11.66 per cent.

Paribas Canada seeks stake in Power Corp.

By Robert Gibbons

MONTRÉAL Feb. 19.

PARIBAS PARTICIPATIONS, wholly owned by the French Paribas banking group (controlled in turn by Compagnie Financière de Paris et des Pays du Nord), may take an equity stake in Power Corporation of Canada, the Montreal-based holding company which owns Consolidated Bathurst, Investors Group and other financial interests and publications.

* Not yet priced

** Placement of floating rate notes

5 Convertible Note Yields are calculated on ABD basis.

Indices

NEW YORK-DOW JONES

	Feb. 17	Feb. 16	Feb. 15	Feb. 14	Feb. 13	Feb. 10	High	Low	High	Low										
Industrial	782.89	784.29	781.89	786.16	774.42	775.98	786.00	781.70	786.00	781.70	786.00	781.70	786.00	781.70	786.00	781.70	786.00	781.70	786.00	
Railroads	85.55	85.14	85.01	85.54	85.77	85.70	85.77	85.50	85.77	85.50	85.77	85.50	85.77	85.50	85.77	85.50	85.77	85.50	85.77	
Transport	204.84	205.60	206.50	205.80	205.80	205.80	205.80	205.50	205.80	205.50	205.80	205.50	205.80	205.50	205.80	205.50	205.80	205.50	205.80	
Utilities	103.82	103.88	104.00	104.00	104.00	104.00	104.00	103.82	104.00	103.82	104.00	103.82	104.00	103.82	104.00	103.82	104.00	103.82	104.00	
Trading vol.	18,500	21,570	20,170	20,470	18,810	19,650	—	—	—	—	—	—	—	—	—	—	—	—	—	
00's t.	18,500	21,570	20,170	20,470	18,810	19,650	—	—	—	—	—	—	—	—	—	—	—	—	—	

* Basis of index changed from August 24.

Ind. div. yield % Feb. 10 Feb. 3 Jan. 31 Year ago (approx.)

5.94

5.98

6.02

4.48

STANDARD IND POOLS

	Feb. 17	Feb. 16	Feb. 15	Feb. 14	Feb. 13	Feb. 10	High	Low	High	Low										
Industrial	90.81	90.94	91.00	91.01	91.01	91.01	91.01	90.81	91.01	90.81	91.01	90.81	91.01	90.81	91.01	90.81	91.01	90.81	91.01	
Composite	67.00	68.00	68.00	68.00	68.00	68.00	68.00	67.00	68.00	67.00	68.00	67.00	68.00	67.00	68.00	67.00	68.00	67.00	68.00	
Feb. 18	67.00	68.00	68.00	68.00	68.00	68.00	68.00	67.00	68.00	67.00	68.00	67.00	68.00	67.00	68.00	67.00	68.00	67.00	68.00	
Ind. div. yield %	5.85	6.17	6.22	6.22	6.22	6.22	6.22	5.85	6.22	5.85	6.22	5.85	6.22	5.85	6.22	5.85	6.22	5.85	6.22	
Ind. P/B Ratio	8.67	8.79	8.84	8.84	8.84	8.84	8.84	8.67	8.84	8.67	8.84	8.67	8.84	8.67	8.84	8.67	8.84	8.67	8.84	
Long Gvt. Bond yield	8.86	8.90	8.95	8.95	8.95	8.95	8.95	8.86	8.95	8.86	8.95	8.86	8.95	8.86	8.95	8.86	8.95	8.86	8.95	

INDICES

YESTERDAY INDEX AND YIELD

February 17 February 18 February 19

Medium term 95.76 95.65 95.55

Long term 92.65 92.55 92.45

Note: The index of convertible bonds has been discontinued.

BOND MARKET TURNOVER (Millions of £m.)

U.S. dollar bonds

London market week

Other bonds last week

U.S. dollar bonds

last week previous week



Monday February 20 1978

Callaghan in Ulster security talks after bomb carnage

BY OUR BELFAST CORRESPONDENT

MR. ROY MASON, the Northern Ireland Secretary, had consultations with the Prime Minister yesterday about security in Ulster, following the restaurant bombing which killed 12 people and injured 30.

The Provisional IRA last night admitted responsibility for bombing the La Mon House restaurant at Comber, County Down.

Meanwhile, Mr. Jack Lynch, the Republic's Prime Minister, denied suggestions by the Northern Ireland peace movement that IRA attacks are mounted from south of the border.

A statement in the Commons is expected from Mr. Mason today after his talks with Mr. Callaghan and senior Cabinet members, including Mr. Fred Mulley, Defence Secretary, and Mr. Merlin Rees, the Home Secretary.

Late warning

The heavy death toll was clearly the result of a bombing raid which went wrong. The attempt to destroy yet another popular nightspot became a nightmare because bomb warnings came too late for anyone to be evacuated.

Radio men's action hits North Sea oil rigs

By Our Labour Staff

OPERATIONS ON about a dozen North Sea oil rigs, including platforms in the Brent and Thistle fields, will be disrupted from today as 44 radars controllers start an official work to rule if a pay dispute.

No major interruption to production of oil is expected initially, but there will be a threat to supplies if action is prolonged.

The radio controllers hold key positions in North Sea oil operations because they handle all communications with supply bases. In particular they are responsible for radio communications with helicopters and supply vessels.

The trouble has been brewing since last October when the National Maritime Board concluded a Stage Two pay deal for officers working in the North Sea and also agreed to a self-financing productivity scheme to give between 12.5 per cent. and 14 per cent. extra from November.

The Radio and Electronic Officers' Union claims that 44 of its members working on rigs owned by Shell, British National Oil Corporation, BP and Texaco, are being excluded from the productivity deal because for the first time they have been placed outside the Marine Board settlement.

More talks

Marconi Marine which employs the radio controllers is paying the Stage Two increase but has told the union that a separate productivity deal must be negotiated for work on oil rigs. To adopt the same deal as that reached for officers on deep sea vessels would, it is feared, be in breach of the Government's pay guidelines.

Separate negotiations for oil rig work have been in progress since December but the union is insisting that the Board payment should be made in the interim.

Mr. Jack Bromley, deputy general secretary of the REU, said yesterday it was decided to go ahead with the work-to-rule after negotiations failed to make progress on the union demands.

A further meeting was planned later this week but meanwhile, radio officers would be refusing to work longer than the stipulated 12 hours a day for a 14-day stint and meal breaks would be strictly observed.

He said the "sudden" departure from the NMB pay agreement by Marconi raised a number of difficulties in operating the complex pay structure because officers were often transferred between deep sea vessel work and work on oil rigs. Average pay at present was between £7,000 and £8,000 a year. He believed that his members could justify a similar productivity bonus on oil rigs to that on deep sea vessels.

The prospect of a build up to a strike by the radio officers is expected to lead oil companies to put pressure on Marconi for an early settlement.

The gruesome task of identifying the victims continued yesterday as the wave of revolution spread. The bomb was of the blast incendiary type, used by the Provos with increasing frequency.

The Royal Ulster Constabulary said cans of petrol were strapped to the bomb, which had been placed at a window in the restaurant. Most of the victims died in the blaze while quickly engulfed the room at the restaurant where members of the Irish Cullie Club were meeting.

Shock tactics

Policemen yesterday distributed thousands of leaflets showing the charred remains of a woman caught in the inferno, in a bid to shock the public into giving information.

Twenty suspected Provisional IRA members were still being questioned in Belfast. They were arrested in a swoop after the explosion, but the RUC admitted that none were suspected of being directly involved. One of them is Gerry Adams, reputed to be the top Republican in Belfast.

A team of 100 detectives began the task of eliminating ever-stranger near the restaurant. They are not directed from Dublin.

It is believed that the IRA's campaigns necessary prerequisite to drawing up a White Paper.

Mrs. Williams had also implied that the Republic was a haven for Provo terrorists, and Mr. Lynch rebutted that suggestion: "I am absolutely

convinced that the IRA's campaign is not directed from Dublin."

He had been expected to reveal that a White Paper was being prepared, but he explained to the 7,000 delegates that an in-depth study would be a necessary prerequisite to drawing up a White Paper.

Giles Merritt in Dublin writes: Referring to a charge made here by Peace Movement leader Mrs. Betty Williams that his recent remarks on Irish unity had given the IRA "the go-ahead to continue their campaign," the Irish premier said the Peace Movement should not enter into controversial politics.

Earlier, Mr. Lynch had described the La Mon bombers as "callous beasts." There seems little doubt that the attack has had a moderating effect on discussions this weekend of the Ulster question at Mr. Lynch's Fianna Fail Party's annual conference.

Think tank?

The expected forthcoming debate on reunification was dampened by the news of the tragedy. The Prime Minister's own keynote speech nevertheless concentrated on the Ulster problem, and Mr. Lynch announced that he is setting up a "think tank" study group on Ulster policy and the implications of reunification.

It is believed that Pontin's marketing is already good, and that Coral's performance is likely to be improved with such shareholders.

"Because they cannot be expected to concern themselves with the day-to-day problems of the company, non-executive directors have a special contribution to make to the debate in the two schools than was feared in some quarters.

Ministers were emphatic that the quest for the correct balance in the April package will, if anything, be more complicated and delicate this year than on previous occasions—even if electoral considerations are set aside.

The nub of the dilemma for the Chancellor is that the 3.5 per cent. growth for the economy forecast for this year is unlikely to be met without an added boost from the Budget. But this has become a riskier proposition after the latest figures on monetary growth and the expansion of imports.

In practical terms the Chancellor has to decide how he imparts the stimulus: although tax cuts are certain, the choice between action on tax allowances or a cut in the bottom band has to be made. The Government's Liberal allies for their part, would like more done on the direct tax front. If necessary offset by changes in VAT or other indirect taxes.

Every sign is that the Chancellor will take full advantage of the time in hand by waiting to see the picture that emerges from the indicators between now and early April.

It is also proposed that the committee should do more to encourage better communication between company Boards and shareholders, even where criticism of management may not be fully made or marked impact on the business scene.

But the committee has followed the principle of seeking to do good by stealth—keeping its activities so secret that they are virtually unknown in many quarters—and have so far made no marked impact on the Board.

It is also proposed that the committee should do more to encourage better communication between company Boards and shareholders, even where criticism of management may not be fully made or marked impact on the business scene.

Mr. Powell's call for large-scale repatriation of families who have perfectly legally settled here. Rounding up coloured men, women and children and packing them onto planes would be totally repugnant to the vast majority of British people."

The next Conservative Government is created by reduced the scope for serious problems arising.

Now so the committee, whose present chairman is Lord Reitman, is to be open to approaches in strict confidence from any director of any company who wants to discuss its management problems.

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